

UMASS/AMHERST



312066 0333 3131 4

LIBRARY  
OF THE



MASSACHUSETTS  
AGRICULTURAL  
COLLEGE

NO. 8028 DATE 8-1888

SOURCE College funds.

v. 3

FLOR  
DEPT.

















THE ————— ❁

❁ AMERICAN ❁

————— ❁ ————— FLORIST.

A SEMI-MONTHLY JOURNAL FOR THE TRADE.

— I ————— I —  
VOLUME III.  
— I ————— I —

.....  
.....

CHICAGO:  
AMERICAN FLORIST COMPANY.  
1888.

## v. 3

\*  
VOLUME III.  
\*

—\*

*Illustrations are indicated by an \**



"Hill, E. G. ....	37
Holly Trade, The .....	247
Hollyhook Disease, The .....	12, 160
"Hot Bed, Board Shutter for .....	328
Hot Bed Cloth .....	328
"Hot Bed Frame Yard .....	62
"Hot Bed Propagating Frame .....	62
"Hot Bed Sash .....	500
Hot Beds, Care of Frames Over Win- ter .....	133
"Hot Water Circulation .....	62
Hot Water Pipes, How to Preserve .....	431
How Does Your Place Look .....	469
Hydrangea paniculata Grandiflora .....	169
Hydrangea, The Climbing .....	169
"Hydrangea, The Climbing .....	567
Hydrangea .....	567
Hygiene of Plants .....	480
Hymenocallis Cathartica .....	540

## I

"Inconvenient Houses .....	254
Indiana Florists, Second Annual Meeting .....	347
Iris .....	516
Iris, Japan .....	371
Iris, Kemper's .....	371
Iron Pipe vs. Hose .....	74
It Don't Pay .....	408

## J

"Japanese Horticulture .....	39
"Jockey Basket .....	130
Judging at Competitive Exhibitions .....	189

## K

"Kalmia latifolia .....	252
"Kennedy Prostrata Marryatiae .....	517

## L

Labor Question, The .....	504
"Lacharme, Francois .....	182
"Laelia Albida .....	227
"Laelia Anceps .....	227
Laetia, Two Winter Blooming .....	225
Landscape Gardening and "Garden Artisans" .....	86
"Langtry Prize, The .....	228
Lapageria, The White .....	540
Lapagerias .....	325
Light .....	500
Lilacs, Japanese .....	20
"Lilies in Pots for Easter .....	421
Lilies, Soil for .....	108
"Lilium Auratum With Forty-five Flowers .....	231
Lilium Candidum .....	82
Lilium Candidum, Forcing .....	88, 374
"Lilium Harrisii, A Field in Bermuda .....	517
"Lilium Harrisii, A House of .....	423
Lilium Trigrinum .....	207
Lobelia Cardinalis .....	135
Lombard Notes .....	567
"Low Houses .....	498
Louisville Floral Exhibition .....	582
Lychnis Fulgens .....	516

## M

Magnolia Parviflora .....	449
Man Who Knows It All, The .....	518
Man With a Secret, The .....	52
"Market Plants .....	322
Marigold, Eldorado .....	62
Morat, Charles H. .....	229
Maryland Hort. Society's Exhibition .....	358
Massachusetts Horticultural Society 50th Annual Exhibition .....	79
Mass. Hort. Society Spring Exhibi- tion .....	34
"McConnell's Basket .....	302
Mealy Bug .....	114
Mealy Bug, The New .....	273
Melon Pear, The .....	159
"Memorial Design for Emperor of Germany .....	265
"Memorial Design for Gen. Paetz .....	329
Mending a Burst Cast Iron Boiler .....	458
Mending a Burst Flue .....	592
"Mignonette, A Disease of the .....	38
Missionary Work by the Amateur .....	105
Mitchell, Joseph E. .....	365
Montbretia Crocosmiflora .....	61
Moon Flower, The .....	161
Moore, John B. .....	46
Morat, Francis .....	229
Moving Decorative Plants in Cold Weather .....	251
Mushroom Growing .....	270
Mushrooms .....	138

## N

Names for Plants, English vs. Latin .....	132
"Narcissus Leda .....	7
"Narcissus Ornatus .....	463
"Narcissus Poeticus Ornatus .....	86

Natal Plants, Notes on .....	542
National Flower, A .....	490, 558
National Flower, A .....	574
National Society, Future of the .....	55
"Nephrolepis Rufescens Tripinnati- folia .....	133
New Orleans Hort. Society's Exhibi- tion .....	446
New York Hort. Society Schedule .....	548
New York Meeting, The .....	236
New York Notes .....	446
Nierenbergia Gracilis .....	182
Notes on Louis Siebrecht's Place .....	436
Notes on Novelles .....	436
Novely for 1900, A .....	105
Nymphaea Pymma .....	105

## O

Observation and Comparison .....	42
"Orchid Show, Arrangement at .....	345
"Orchid Show, Exhibit at the New York .....	344
Orchid Hunt .....	180
"Orchid Show, The New York .....	318
Orchids, Among the New Jersey .....	229
"Orchids and Other Plants, An Ar- rangement of .....	469
Orchids, Buying .....	354
Orchids for Cut Flowers .....	254
Orchids Now in Bloom .....	206
Orchids, Points for Beginners .....	426
Orchids, Preparing Pot for .....	426
Orchids, Short Notes .....	112
Orchids, Short Notes on .....	426
Orchids, Timely Hints .....	472
Order Sheet, A Convenient .....	136
Orders for Future Delivery .....	136
Ostrya Falcata Magnifica .....	516
Overhead Piping .....	516
"Oxyechium Japonicum .....	545

## P

Packing Plants .....	500
Packing Plants for the Pacific States .....	621
Paint .....	500
Palm for Room Decoration .....	244
Pansies .....	540
Pansies Again .....	621
Pansies, An International Race of .....	521
Pansies, Beautiful .....	431
"Pansies, Giant .....	255
Paradise Apple, The .....	390
Pelargoniums, Ivy Leaved .....	20
Pelargoniums, New Ivy Leaved .....	160
Pennsylvania Hort. Society .....	129
Pennsylvania Hort. Society's Exhibi- tion, September 22-23, 1897 .....	194
Pennsylvania Hort. Society's Spring Show .....	419
Philadelphia Florists' Club Annual Supper .....	363
Philadelphia Florists' Club, The .....	240
Philadelphia Notes .....	256
Pilea .....	446
Pilea Decussata, White .....	540
Phlox stellaris .....	468
Phlox Subulata .....	468
Phloxes, Autumn .....	60
Pilea Excelsa var. Conica .....	449
"Pillow With Crown Above .....	5
Plant Diseases .....	500
"Plant Decoration, Arion Club House .....	134
"Plant Decorations at New York House for .....	350, 385
Plant Houses, Proper Atmosphere for .....	230
Plant Notes .....	4
Plant Trade for 1888 .....	620
Plantain Lily, Blue .....	60
Plants, A Standard Classification for .....	471
Plants, Are They Manufactured Ar- ticles .....	397
Plants, Selling Prices of .....	2
Poinsettias .....	182
Point for Southern Readers, A .....	496
Poppies, The Mikado .....	540
Portland Cement .....	75, 89
"Potting Bench .....	84
"Pot Luck .....	69
"Potting Soil .....	160
Potting Soil, Preparing .....	475
Presentation of the Langtry Prize .....	394
Preserving Lumber .....	240, 416
Prices of Flowers .....	312
Prices of Plants .....	516
Primrose Day in England .....	443
Primula Seed .....	296
Profits .....	198
Propagating House, The .....	158
"Pteris Cretica Albo-Lineta .....	545
"Purkin, Iron .....	68
"Purkin, Iron for Greenhouses .....	8
Pyrethrum Uliginosum .....	61

## Q

Quality .....	345
---------------	-----

## R

Rain Water .....	138
Raising New Plants .....	298
"Reid, James .....	405
Renee .....	405
"Rhonda in Floral Work .....	327
"Rhaps. Flabelliformis .....	401
Roland for Your Oliver, A .....	444
Rosa Rugosa .....	450
Rose American Beauty III, 133, 156, 185, 304, 701 .....	454
Rose Bad and Bad Words .....	300
Rose Bug, The .....	300
Rose Bags .....	512
Rose Caeopatra .....	274
Rose, Comtesse de Frigneuse 252, 275, 349 Rosa .....	434
Rose Cornelia Cook .....	518
Rose Cornelia Cook, Growing and Forcing .....	322
Rose Grub, The .....	275
Rose Grub, How to Exterminate .....	275
Rose Her Majesty .....	130, 156, 470, 494, 518
Rose Houses, Ventilators for .....	436
Rose Madame Watteville .....	300
Rose Marechal Niel, The .....	228, 275
Rose M. Niel for Winter bloom .....	274
Rose M. Robert .....	470
Rose Mrs. Beatrix Joseph Godier .....	470
Rose Mme. Gabrielle Luitet .....	518
"Rose Mme. Georges Brunt .....	518
Rose, Mr. C. Ramsden's New? .....	397
"Rose Mrs. John Laing .....	238
Rose Mrs. John Laing for Forcing .....	343
Rose, Nameless Beauty .....	57
Rose Princess Beatrice .....	131, 518
Rose Remark, A .....	434
Rose Reminders .....	294
Rose, Ten Madam Joseph Godier .....	519
"Rose the Fair Unknown .....	425
Rose the Parian 32, 373, 374, 396, 424, 470, 494 .....	494
Rose Victor Verdier .....	494
Roses, A Few Observations .....	494
Roses, American Beauty of Mme. F. Jardin .....	82
Roses at Chicago .....	300
Roses at New York .....	373
Roses at Philadelphia .....	228, 274, 372
Roses at Washington .....	372
Roses, Black Mildew on .....	204
Roses, Black Spot .....	204
"Roses, Black Spot in .....	424, 117, 168
Roses, Bon Silene and Gondier .....	100
Roses, Budded or on Own Roots .....	110
Roses, Budded Perles .....	322
Roses, Bull Head Perles .....	322
Roses, Club Root in .....	396
Roses, Cost of Growing .....	494
Roses, Cutting .....	55
Roses Experience With the Newer .....	368
Roses for Summer Flowering .....	368
Roses, Experience With Some Var- ieties .....	366
Roses, Fragrant Polyantha .....	450
Roses, Grafted and Own Root .....	450
Roses in Cut Flower Market .....	245
Roses in Five Inches of Soil .....	378
Roses, Malformed Perles .....	374
Roses, New .....	160
Roses, New for 1888 .....	160
Roses, New Hybrid .....	494
Roses on Stocks vs. Those on Own Roots .....	68
Roses on Their Own Roots .....	82
Roses, Packing Flowers for Market .....	450
"Roses, Packing for Market .....	450
Roses, Packing Plants .....	495
Roses, Packing Plants of .....	495
Roses, Planting .....	542
Roses, Propagating .....	322
Roses, Pruning .....	111, 130, 189
Roses, Pruning Tea .....	252
Roses, Red Spider and Bull Heads .....	274
Roses, Reminders .....	82
Roses, Some conclusions .....	574
Roses, Some New .....	319
Roses, Stocks for Tea .....	69
Roses, Summer Propagation of, With a list of best varieties .....	40, 58
Roses, The Manetti as a Stock for Tea .....	130
"Roses, The Modern Knights and Pur- suits .....	495
Roses, Worked and Own Root .....	110
Roses, Wintering standards .....	156
Roses, Worked vs. Those on Own Roots .....	69

## S

Salpiglossus .....	4
Salvia .....	476
San Francisco .....	534
Sash Bar, Improved .....	106
Satin Star of Bethlehem .....	106
Seasonable Work .....	521

Seasoned Lumber .....	558
Secret, A .....	239
Seed Novelties .....	184
Seeds in Canadian Mails .....	380
Seedman, Bill Nye on the .....	456
Seedsmen's Convention, The .....	384, 328
Seicographic Gishbrechtiana .....	251
Shade, A Good Temporary .....	456
Shading Small Palm Houses .....	475
Shantung Cabbage .....	504
Shipping Plants by Express .....	136
Slugs and Snails .....	134
Smilax .....	107, 447
Smilax, is it Profitable? .....	277
Some Choice Samples .....	573
Society of American Florists, Ad- dress by President Robert Craig at Third Annual Meeting .....	25
Society of Minnesota Florists .....	332
Southern California Florists .....	546
Springfield Mass. Exhibition .....	546
"Spring Flower Favor .....	444
"Spring Has Come, The .....	343
"Spring Souvenir Basket .....	473
Sibley, Hiram .....	577
Statesmen Who Love Flowers .....	142
"Statice Superba .....	184
Steam Boilers, Feeding .....	465
Steam Heating .....	400
"Steam Heat and an Overhead Radia- tion .....	523
"Steamer Souvenir Basket .....	523
Stephanotis, Flowering the .....	278
Stock Plants .....	497
"Stopping Leaks in Steam Pipes .....	208
Storage Room .....	497
Storm, The Great .....	575
"Strengthening Root of Green- houses .....	496
Streptosolen Jamesoni .....	325
Substitution .....	172
Successful Culture .....	469
sunflower, New Miniature .....	5
sunflower, Perennial Double .....	5
Swamp Pea .....	256
Syringa Japonica .....	198

## T

"Table Decoration .....	186
Timely Hints .....	343
Timely Suggestions .....	6
Torenia Fournieri .....	60
Trillium Grandiflorum .....	254
Tritosmas .....	61
"Tropical Plants, A Summer House for .....	492
Tulips .....	192
Tulip, The .....	473
Two Reports and Why They Differed .....	520

## V

Vallota Purpurea .....	109
"Vanda Cerulea, A Group of .....	239
"Vaporizer, Nicotyl .....	10
"Vase for Lawn Decoration .....	498
"Verbenia Greenhouses .....	473
Veronica Rust, The .....	325
Veronica Longifolia .....	60
Violet, The .....	325, 469
Violet Disease, The 53, 134, 158, 293, 324, 492 .....	62

## W

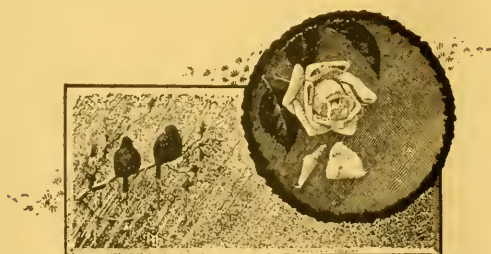
Wallflowers .....	468
"Warehouse, D. M. Ferry & Co's new .....	14
Water .....	83
Water Cresses .....	220
Water Over Glass as a Roof to Plant Houses .....	18
Water Rates .....	543
Water Rates, Greenhouse .....	50
Watering .....	231
Watering, Light as a Cure for Disease .....	82
Water Lilies for Winter Bloom .....	201
"Wedding Arrangement .....	541, 543
"Wedding Decoration by Klunder .....	405
"Wedding Decorations .....	243
White House Conservatories, The .....	398
"Wholesale Prices of Plants .....	516
Why Buy Whistles so Dear? .....	445
Will a Rose Show in June Prove a Success .....	390
Winter Visit to H. H. Hunnewell's .....	368
Wood, Protecting From Rot .....	93

## X

"Xanthocheas Sorbifolia .....	109
-------------------------------	-----

## Z

Zinnias .....	4
---------------	---



Goodell H H  
Lyon Mass. Agric. College  
Nov 1897





# THE AMERICAN FLORIST



*America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."*

Vol. III.

CHICAGO AND NEW YORK, AUGUST 15, 1887.

No. 49.

## THE AMERICAN FLORIST

Copyright, 1887, by American Florist Company  
Entered as Second-class Mail matter.

Published on the 1st and 15th of each month by  
THE AMERICAN FLORIST COMPANY.

GENERAL OFFICES, 54 La Salle Street, Chicago.  
EASTERN OFFICE,  
Room 81, Vanderbilt Building, New York.

All communications should be addressed to the  
general office at Chicago.

SOCIETY OF AMERICAN FLORISTS.—Robert Craig, Philadelphia, Pres.; J. C. Vaughan, V. Pres.; M. A. Hunt, Treas.; Edwin Lonsdale, Chestnut Hill, Philadelphia, Sec'y. The third annual meeting at Chicago, August 16, 17 and 18, 1887.

THE CONVENTION.—All present indications are that the meeting which convenes here to-morrow will be the largest ever held by the national society. Look for full account in next issue, with Convention Supplement giving names of those present.

WITH THIS ISSUE begins the third year of the publication of this journal. The increase of the volume just completed over Vol. I. was 94 pages—a gain of 22 per cent. We hope and believe that this increase may continue, and that the increase in size may also represent increased practical value to our readers. We trust the number of our really practical and thorough florists who are capable of aiding their brother workers through these columns, and fail to do so, will become less each year. We cherish the slowly-reviving hope that it is not entirely true, as has been said so often, "Those who are posted won't write, and those who know nothing are always in print." Has it not been proven that "To him that hath, much shall be given?" Certain we believe it to be, even in our short experience, those who have been most liberal in this regard in the columns of the FLORIST have not been losers. We cordially invite the encouraging influence of all who desire an American florists' journal! of the first rank.

SUBSCRIPTIONS for the AMERICAN FLORIST may be left with any of the following:

Baltimore, R. J. Haliday.	New Orleans, H. A. Despommier.
Boston, W. J. Stewart.	Philadelphia, Edwin Lonsdale.
Buffalo, Daniel B. Long.	New York, W. S. Allen.
Cincinnati, Harry Sunderbruch.	Aug. Rolker & Sons.
Cleveland, O. Mrs. E. G. Campbell.	C. H. Joosten.
Detroit, J. Breittmeier & Sons.	Pittsburgh, J. R. & A. Murdoch.
Hamilton, Ont., Webster Bros.	St. Louis, Michel Plant & Seed Co.
Harrisburg, Pa. J. Horace McFarland.	San Francisco, Thos. A. Cox & Co.
Louisville, George Thompson & Sons.	Toronto, Ont., J. A. Simmers.
	Washington, D. C., L. Schmidt & Sons.

### The Florist of the Future.

Shall he be a landscape gardener and botanist and be otherwise equipped with various arts and sciences, including geology and chemistry, as E. A. W. suggests? This question deeply concerns the coming generation of florists, the boys who are now getting their education and who will soon take our places.

So far as landscape gardening is concerned the question can be easily answered. The scarcity of landscape gardeners is due to the extreme difficulty of an art which requires long years of preparation together with a critical knowledge of architecture, for without this knowledge, failure is inevitable. It was to this that the late A. J. Downing owed much of his success. There is certainly a fine opening here for young men of capacity who have the means of acquiring the necessary education, and this education cannot be acquired in the greenhouse or garden.

Landscape gardening is to gardening what architecture is to carpentry. The broadest culture is demanded in addition to technical training. A college course is almost a necessity, to be followed by three or four years with an architect, where the theory of landscape gardening can also be acquired. This training will give a social position which is essential to one who will often be the guest of cultured people. While the training of the florist does almost nothing toward fitting him for the professional duties of the landscape gardener in the true meaning of that term, there is a minor branch of the art which is fairly within his reach and which might yield him much profit if intelligently pursued. I allude to the laying out and planting of small house lots, such as every town contains. A florist who can draw a neat plan of such a lot, showing the buildings and the location of each tree, shrub and plant, with paths properly laid out, and will contract for a fixed sum to plant the lot and make the walks, will not lack work, for there always has been and always will be a call for just such services. The florist who can do this in a thoroughly artistic manner, with a happy blending of form and color, will soon find himself in the possession of an enviable reputation. The FLORIST can help in this matter by giving a typical plan now and then from some skillful hand.

That the florist of the future must be expert in at least one science, preferably botany, can hardly be disputed, and it is not because thorough scientific knowledge is directly and visibly useful to all florists, but because in obtaining this knowledge habits of close observation and accurate reasoning are acquired. Botanical work is, much of it, done under the microscope, demanding minute research and careful comparison; in a word

a scientist is taught to think, and the florist of the future must think to some purpose if he expects to prosper. By no other means can the powers of observation and reflection be acquired so easily and thoroughly as by the study of the natural sciences.

Our trade will probably follow the course that every trade has followed since trades were known. Competition will become sharper, prices will become lower, large and well managed establishments will become larger and stronger, small and ill managed ones will fail to support their proprietors and one by one they will disappear. It takes three times the capital now to establish a profitable business that it did twenty years ago, and by the end of the century it will probably take twice as much as it does now. The trade has advanced at a wonderful rate within a few years. We are upon the threshold of a new era. In the past it has been a question of hands chiefly, backed by no more judgement than a farmer uses in plowing his land or hoeing his corn. The florist of the future must be thoroughly trained in every direction, he must be a keen observer and a close thinker, and above all things he must be a business man. If he is not thus qualified he must be content to work hard for a bare living, and he will not always get that.

The city florist needs a special training, and of a kind which can scarcely be obtained in this country, where the number who can meddle with flowers without violating every canon of taste is extremely limited. It is the daily duty of the average florist to perpetrate every conceivable outrage in form and color. Nothing but the fact that the majority of the community is entirely lacking in artistic sense will account for the good-natured reception accorded to the ghastly rubbish which is inflicted upon it in the name of decoration. The arrangement of flowers is an art requiring much study and a thorough knowledge of form and color. With us this art is degraded to a mechanical trade, anyone is supposed to be able to stick flowers into a wire form.

So long as these incongruous and grotesquely inappropriate designs are demanded by the public they must be made. But are they demanded? Are they not rather forced upon the public by the florists themselves in their rage for novelty?

When prizes are awarded for the best designs it would be to the advantage of the florists if the awards could be made by artists rather than by themselves.

The artistic arrangement of shop windows, might lead to interesting competitions. Let each florist do his best upon a given day, and let a committee of the local art club decide between them.

Florists seem to think that they can omit that careful preparation which is so necessary to success in the various arts, and the idea of studying the principles of taste, form and color probably never occurs to them. Yet the art of arranging flowers is as legitimate a subject for study as the art of painting. The time is coming when vulgar imitations of mechanical objects will no longer be tolerated, the taste of the public is being educated in this as in all things, and it is to be hoped that the florist of the future will lead the public taste, as artists should, rather than follow it. L. W.

### The Education of Gardeners.

This is a subject of far more importance than the first glance at it reveals. The name as used may mean a man who can milk a cow, feed pigs, groom a horse, do chores around a house, in fact be a Jack of all trades and claim the "title" of "gardener" if he only has a bit of a yard to cut with a lawn mower and a patch of potatoes to care for. The trouble is that since "Adam" was the first gardener all men are more or less able to do a little of the work, but where there is one man that can be properly called a gardener there are a hundred who claim the title without any right whatever.

I for one do not consider a man entitled to the name unless he is capable of understanding the nature of the soil he has to contend with, and know what ingredients to add to it to make it fertile and productive at the least cost. Secondly he should also be able to take full charge of the laying out of driveways and walks, the grading of ground, planting of trees and shrubs, etc., and the proper care of them until established, he also should be able to draw plans and give specifications as to cost, etc. Thirdly he ought to be able to keep account of all expenses in a proper business manner. Lastly, though not the least, he should be well posted in all that appertains to the growing of fruit, flowers and vegetables under glass and in the open ground, also knowing the remedies and how to apply them for checking the inroads of insects and mildew.

Whether it will pay any of your readers to devote time to attain these abilities I leave to their own good judgement, but I will say to all that without them they must always expect to occupy an inferior position. W. C.

Bay View, Mass.

### Commercial Floriculture.

Mr. Maher is mistaken if he supposes I have said anything in support of florists who depend upon their business for their living, crowding their houses with such plants as are not in demand in the market. The idea meant to be conveyed was that modern fashion has created such a demand for the flowers obtained from so few plants that those employed in the business have a poor chance to become acquainted with very many varieties well deserving their careful attention. Men therefore so employed must go outside of such establishments if their ambition leads them to acquire an extensive knowledge of plants in their diversity of character and culture.

We say this knowing that many regard the "departmentizing of business" as one of the glories of the age, and Mr. M. under this impression says that "young men working on this line can grow more roses, better roses and get more money from them than men who habitually

grow a more diversified class of stuff." A statement which may be either true or false, as all depends upon the man at the head of the establishment, and the facilities under his control as to how this shall be. The man of fair understanding is not apt to be one-sided in his leanings. Why may he not therefore excel in growing a thousand varieties of plants as well as one or two dozen. To think otherwise is to estimate his abilities to know and to do greatly below their true value.

Mr. M. seems not insensible to the benefits which a florist might derive from a knowledge of botany, but that old stumbling-block—want of time—stands between him and the attainment of his wishes. This excuse cannot be accepted, and it is not apt to be urged by any one in earnest, for although deep in business, snatches of time can be had by almost every one for the prosecution of a favorite study. I have known young men who, while employed as under gardeners, and with good opportunities to acquire a fair knowledge of exotic plants, were not content with these alone, but after "sweating their sixty minutes to the hour" went to the woods and meadows in search of such as grew there. Not one of these men had the advantages of a classical education, but this want was in some measure supplied by the overmastering desire to learn what they could of all plants native and foreign. After pursuing this course for a season or two, they had little difficulty in naming most of the specimens which came in their way without other aid than a good botanical book or two. To make these excursions still more attractive, a lime stone quarry lay within reach, rich in the fossil remains of ferns which flourished long ages ago. Scarcely a fragment of the debris cast aside by the workmen but bore the imprint of fronds. Many of these they collected and carried home deeply impressed with the thought that the flora of the globe—past and present—is great in number and variety; and to search diligently into the mysteries thereof well becomes the thoughtful man whether his worldly interests are advanced or not.

All knowledge so acquired may not be of equal benefit to the horticulturist, but enough will be gained to reward him for his time and labor. And although all men cannot be equally successful as they are not endowed alike by nature and favored by circumstances, they may nevertheless progress by following in the paths which men of genius have opened up and illuminated. They will thus be able to conduct their business as florists and horticulturists with a degree of intelligence unknown to the mere novice. They will not be the men who, when called upon to perform such simple work apparently as pruning mixed shrubbery, treat all alike, knowing that their habits of growth and times of flowering are such as to require different treatment. Neither could they be hoodwinked into the belief that there is virtue in patent mixtures of grass seeds for lawns knowing that as fine a sward can be raised from one or two species, either separate or mixed, as was ever pressed by the dainty foot of a Maud. Neither will they invest in seeds of *Panicum virgatum* or *Vernonia noveboracensis*, although advertised by leading seedsmen as new and scarce, when they could be collected by the cart-load in the meadows and waysides near by. Or go into cesticases as a lady did the other day over a packet of cinnamon vine seed—*Apios tuberosa*—

which she bought in New York as a great novelty, knowing that it also is among the natives and not hard to find.

New Haven, Conn.

A. VEITCH.

### Selling Prices of Plants.

BY A. E. W.

The test of the prices realized for plants in various cities of the Union, during the last spring trade, which appeared in the *FLORIST* of July 1, should command our attention. The figures vary considerably; for instance, at one place we notice that pansies were sold as low as 25 cents per dozen, while in others the prices obtained ranged as high as 75 cents to \$1 per dozen.

With all other plants noticed, the same disproportion in prices exists—a difference of from \$2 to \$5 per dozen being of frequent occurrence. This is truly a remarkable difference and the question might well be asked; what is the cause of this striking fluctuation of values?

We certainly have no reason to believe that plants can be grown much cheaper in one city than in another. The cost of fuel and of labor do not vary so greatly that some men can sell their produce for 200 per cent. less than others. Perhaps their methods of cultivation are much simpler, or they have some "secret" which enables them to grow plants more quickly and occupy less room with them, than others not so fortunate. If such is the case many of us would be glad to learn from those who are wiser, for supposing that plants can be grown at these lower rates at a profit; those that sell at the higher prices must be doing a splendid paying business, if the quantity sold is at all up to the average production of the average greenhouses of the country.

Granted that the values of most commercial articles are fluctuating, and that the market quotations of one week are no criterion for those of the next, yet, the prices at which the commodities are retailed, do not vary greatly in any city. When the wholesale market advances or declines, the retailer correspondingly values his stock; and as all are acquainted with the market rate, it is impossible for any one to sell below that figure without being aware of the sacrifice he is making. Some, perhaps, by selling inferior articles, under the name, and for the price, of those that are superior, may for awhile, under-sell his competitors; but such methods will in the end, be to the detriment of the man who practices any such kind of cheating.

In the sale of plants, however, there is no such arbiter of values. Those engaged in growing largely for the wholesale trade, have usually their catalogue prices in about the same ratio, and these ought to, and do, to some extent govern the retailers. But so many thousands of plants are now sold at auction sales, with the result of sometimes commanding a fairly remunerative price; but, more frequently, owing often to the poor quality of the stock offered, the plants are knocked down to buyers at figures far below the sum it cost to grow them. These large sales, no doubt, tend very much to weaken values; and those growers who flood the market with large quantities of plants in excess of the demand, should consider well, whether producing so much is not more of an injury than a benefit.

We are all eager to do too much—"Haste to get rich," is the motto. He that makes the most money is the ablest and shrewdest. Quality is lost sight of





YUCCA OVERGROWN WITH VINES, IN THE ARIZONA GARDENS, HOTEL DEL MONTE, MONTEREY, CAL

in quantity, and the man who grows thousands in the same space as he who grows hundreds, judges that he can sell at much lower figures, and still reap a handsome profit. The chief aim appears to be to increase the profits, at the expense of our reputation as growers, and, very often, as honest men. Suppose that our plants are of inferior merit, wrongly named, and of small and weakened appearance—what matter, so long as the profit is large! This argument would be worth consideration, if profit was the only thing to be striven for. With some men a reputation for business integrity is an object of considerably more importance than the mere gathering of dollars and cents.

Another mistaken idea that is an influence with many, and causes low prices, is the fallacy that cheapness is the main factor that decides the public in their purchase of all articles. Cheap stores and cheap goods do command an extensive patronage. But it is the patronage, principally, of a variable class, uncertain in their needs and fickle in their tastes. A class, that as a rule, do not buy many flowers, or many plants. People who always buy cheap goods, are always on the look-out for still cheaper articles, and will be sure to patronize the merchant who sells at the lowest price. With patrons of this kind cheapness is the main consideration. Is this the class a responsible business man should cater

to? Or, should he seek, rather the patronage of that class who place the quality of the article they purchase as of the first importance, accounting cheapness of secondary moment. Such customers do not leave the merchant they deal with because someone round the corner is selling for a few cents cheaper. So long as they are convinced of the fair dealing of the firm they patronize, and that the articles sold are of the best, a continuance of their custom may always be relied upon. Handling only the best, and selling at a fair profit; truthfulness and conscientiousness in everything represented, are of infinite more importance in the establishment of a firm, paying business, than any method that savors of a sacrifice of reputation for the sake of a temporary and present gain.

This constant endeavor to under sell for the purpose of gaining customers, may succeed for a time, but will assuredly, in the end, bring defeat. People attracted by cheapness, will continue to expect cheapness. Besides, those already established in the same business, generally manage to meet these cuts. Witness the railroads. A railroad war never brings money to the pockets of the shareholders.

Competition is fair, and may surely be expected, but a cutting of prices is exceedingly foolish, and can never bring business success. Let those commencing, or about to commence a florist's business, remember this; and let their efforts be to found their venture upon the quality of the plants and flowers they sell, rather than upon a lower price than their neighbors. It is perhaps impossible to fix a uniform rate for our productions, both the quality and quantity of what we raise depending so much upon individual exertions and experience. But we might equalize our rates better than we do. It is not hard for a florist to figure out the actual cost of any variety of plants that he grows. Such a plan has been frequently recommended in the columns of the *FLORIST*. Unless something of this kind is done, he will always be at a loss as to what pays. No man following this system would ever continue to retail pansy plants for 25 cents per dozen. Neither will any one derive much pecuniary benefit from geraniums at \$1 per dozen.

There is a remedy for these exceedingly low prices. It rests with the florists themselves to change matters for the better and establish a basis for a schedule of prices, that shall be remunerative to the retailer. The florists of each city could combine and agree not to under-sell one another. Rates, fair to the buyer, and profitable to the dealer, could easily be fixed. But it seems almost hopeless to look for this harmony. There is so much local jealousy; so widespread a belief that only by cheapness and under selling can custom be obtained, that to effect an agreement is sure to be difficult. It is to be hoped that florists will eventually see their error, and agree to some combination for the prevention of ruinous competition.

[In the "haste to acquire riches" he overreaches himself who permits "quality to be lost sight of in quantity." No permanent benefit can be had in this way, rather in fact a decided injury as the reaction is sure to come from such methods.

Business integrity must be the foundation for any lasting success, but get all the dollars you can get by honest methods. The man who professes to run his business solely for the good of humanity is a hypocrite.—ED.]



The Cypripedium.

BY V. A. MANDA.

Not only is this genus the most floriferous of the family, but the flowers keep much longer than those of other orchids, and we may safely say that cypripeds produce the most lasting flowers of any flowering plants. In some cases the blooms will keep the extraordinary time of over four months on the plant, and fully six weeks if cut. This, of course, is only when they are properly treated; that is, in the flowering season the plants should be kept in an airy and comparatively dry house, and syringing should be avoided during that time, else it will cause the flowers to drop off, especially in dull weather.

In other cases, again, as in the selenipidium section, the flowers will succeed each other for nearly ten months out of the year, and on that account these are very desirable. Some of the hybrids, again, such as *C. Harrisianum*, *C. Ashburtoniae* and others, will produce flowers twice and sometimes even three times during a year, which is an additional recommendation.

All of the deciduous kinds will last from three to five weeks in beauty, provided that they are sheltered from the burning sun, which otherwise is liable to scald them.

Among the evergreen kinds we find some species and hybrids of remarkable lasting qualities. Thus the *C. insignis* and its varieties, *C. Dauterlii*, *C. villosum*, *C. Hookeri*, *C. Bullenii*, *C. Boxallii*, *C. Harrisianum*, *C. Crossianum*, *C. hybridum* and *C. Spicerianum* will keep from twelve to fifteen weeks in beauty; the *C. barbatum* and its varieties, *C. vexillarium*, *C. Petri*, *C. Dayanum*, *C. cernanthum*, *C. chloroneum*, *C. niarnorophyllum*, *C. nivicum*, *C. calophyllum*, *C. selligerum*, *C. curyandrum*, *C. Ashburtoniae* and *C. Lawrenceanum* will be fresh after the time of nine to twelve weeks has passed, and such as *C. Javanicum*, *C. Veitchii*, *C. purpuratum*, *C. concolor*, *C. venustum* and its varieties will last from six to nine weeks.

It is among the selenipidium section that we find the longest bloomers; not that the individual flowers keep for an unusual time, but that the flowers will succeed each other without interruption for nearly a year, and no doubt by having large and thrifty plants of such kinds as have long spikes we could have a plant in flower all the time. As a rule, the duration depends on the number of flowers that a spike may have. Thus *C. Dominianum*, *C. caudatum*, *C. Tropidium Lindenii* and *C. Wallisii* will last four to eight weeks in full beauty, while *C. Schlimii*, *C. Pearcei*, *C. stenophyllum*, *C. grande*, *C. Schroderae*, *C. calycinum* and *C. albo-purpureum* will flourish for eight to fifteen weeks, and even longer. The remainder are what we may call perpetual bloomers, an I a strong plant of either of the following will seldom be seen out of bloom: *C. Sedenii*, *C. longifolium*, *C. Hinksianum*, *C. Roezlii* and *C. Hartwegii*.

When cut, the cypripedium flower will usually keep for nearly half the time that it actually lasts on the plants, provided fresh water is given every day and the end of the scape cut a little to allow the absorption of water.

Being of firm texture, the cypriped will travel far better than any other orchid, and especially when the flowers are cut they may be sent any distance, and when properly packed will arrive after a fourteen days' journey as fresh as when they were sent away, which is a recommendation that should not be overlooked by those who make a business of shipping flowers.

Bot. G'd'ns, Cambridge, Mass., Aug. 6, '87.

#### Plant Notes by W. F., Long Island.

**KEMPER'S JAPANESE IRISES.**—July 20, all past.

**SINGLE DAHLIAS.**—Since the 90's set in the flowers have come poor.

**CINERARIAS.**—Same as calceolarias. They grow faster and need more room.

**TRIMARDEAU PANSIES** have been larger than Bugnot's Giant or any other strain that I have grown this year.

**AFRICAN MARIGOLDS.**—This very hot, moist weather drives them too much to growth and too little to bloom.

**PEONIES.**—There is an impression current that peonies transplanted in spring do not bloom that year—but they do.

**MOONFLOWER.**—See what advertising does! Most every old lady in our village has a moonflower running up a string in her yard.

**SCABIOS.**—April sowing has been in good bloom since the middle of July. The large-flowered, dark colored ones are great favorites.

**CONSTANCE ELLIOTT PASSION FLOWER.** planted out of doors, is growing and blooming as freely as any other passion flower. But it isn't very showy.

**IMPATIENS HAWKERI.**—Anybody got it? It was May before I tried to get some seed of it. I have tried here and in England, but unsuccessfully in either case.

**CHINA ASTERS.**—July 25, these are beginning to open. Sown about the last of March. Successions will maintain a full supply till frost. Nothing better for cut flowers.

**GLOXINIA SNOWFLAKE.**—From seeds obtained from Sutton and sown last March, the plants are now in bloom, and the flowers are pure white and of good substance.

**SALPICLOSSUS.**—These came into good bloom about July 20th. They are pretty and display a goodly variety of color, but there isn't body or quantity enough of them for the florist's use.

**GLOXINIAS.**—Raised from seed last March, pricked off into boxes in April, and planted out in cold frames the first of June, they now have completely filled the frames and are in full bloom.

**"ELDORADO" MARIGOLDS.**—Began blooming about the middle of July. They are the better for a stout stick and a string. They will yet bear a good deal of painstaking selection; many single ones still crop up among them.

**CHEYSANTHEMUM SEGETUM.**—The yellow ox-eye daisy of Europe, and now widely advertised in our seed lists. Here

it is in bloom since the middle of June, free enough to be sure, but what on earth is the use of filling up our ground with trash of its sort?

**ZINNIAS, CHOICE DOUBLE MIXED.**—Burn the seed and save your land and pains for something worth growing. The best spread of double zinnias I have ever grown I have in bloom now; they are scarlet and white pompones, and American grown and selected seed.

**HELIOTROPE ROI DES NOIR.**—In rich, moist but light land and an open sunny situation, this lovely heliotrope has behaved splendidly with me this summer. Its large, very dark close heads of flowers are in by far greater demand than are those of any of the lighter colored sorts.

**DOUBLE WHITE FEVERFEW, LITTLE GEM.**—I cut over a lot of it the middle of June and before it was in full bloom, and it is now in full flower. Those which I left till it bloomed out and began to fade before I cut it over, is now quite bare of flowers, but will come in again in five or six weeks.

**SCHIZANTHUS PAPILIONACEOUS PYRAMIDALIS** is a new annual—a novelty of this year. It is a capital variety of an old favorite, and fully justifies its catalogue description. But for florists' use there isn't body enough to it. Ten weeks from seed-growing to seed-gathering, I have found.

**BROMPTON STOCKS.**—Happy are they, no doubt, who get the "immense spikes of very double flowers of the most brilliant colors." I get the spikes and the colors all right, but the "very doubles" are so very few that I seldom get one at all. Intermediate stocks sown in June are my mainstay for spring.

**IMPATIENS SULTANI.**—What a bright and pretty plant this is, and a perpetual bloomer! It grows and blooms and scatters its self-sown seedlings around our greenhouses and in the flower-pots and baskets as freely as if it were a yellow oxalis or other weed. And planted in summer, it is as good as a tuberous-rooted begonia.

**CHINESE PRIMROSES.**—Sown in March, now in 4, 5 and 6-inch pots, and in cold frames. Ventilate freely day and night; remove sashes at night if not storming. Keep close to the glass but shade from sunshine; water moderately but avoid overwatering, and in repotting drain the pots very well. Seven-inch pots are big enough for biggest.

**AIRY FLOWERS.**—*Gypsophila paniculata* is past, July 25. *Euphorbia corollata* is at its best, although a great pest in some quarters, restricted, and in rich ground it becomes a capital garden flower at this season, and very suitable as airy sprays in flower work. The broad headed form of *Statice latifolia* is also good for the same purposes.

**CALCEOLARIAS.**—Mine were sown June 22, and now are up and pricked off into other boxes. They are in cold frames and raised up close to the glass. They are ventilated day and night, shaded from sunshine at all times, and a layer of tobacco stems is spread in the bottom of the frames to dispel thrips and aphides. Look out for slugs and snails.

**CANNA EIMANNI.**—I let a lot in a cold frame where the soil is deep and rich and it gets any amount of water. It began blooming the middle of June, and has ever since continued to grow with unusual vigor and bloom unstintedly.





PILLOW WITH CROWN ABOVE.

We use the flowers for large vases and bold effects in house decorations. Cut the "spikes" with stems 3 to 4 feet long and with leaves attached. It is the finest thing we have in the way of cannas.

**PERENNIAL DOUBLE SUNFLOWER** (*H. multiflorus* fl. pl.)—Is coming into bloom, July 25. What a capital garden plant this is. Its flowers are bright, showy, neat, and the stems leafy, so that in cutting them for decorative purposes, the leaves add to the charm of the flowers. A good but neat grower. May be multiplied by division exceedingly. But it isn't reliably hardy. A warm, sheltered place, a mulching or a cold frame usually preserves it all right. I like the single flowered variety just as well as the double one.

**"NEW MINIATURE" SUNFLOWER.**—This appeared a year or two ago as a novelty in seedlists, and a capital thing it is too. But that is no reason why they should take an old plant and give it a new name and big boom. This is *Hel-*

*anthus cucumerifolius*, a native of Texas, and a plant that I have grown and which has been in constant cultivation for a dozen years. It has a great and continuous profusion of small, bright yellow flowers with dark centre, and is of long-lived, branching habit, 4 to 6 feet high. In bunches, its flowers are much esteemed for large vases.

#### Pillow with Crown Above.

In response to a call from numerous readers for illustrations of well-made floral work of more conventional design than we have heretofore published, that they "may see how the florists in the large cities make up their usual run of work," we present the accompanying engraving of a pillow with crown above, arranged by one of Chicago's leading florists. While the engraving does not do the piece justice, it may suggest ideas to some of the readers above mentioned.

**WOOD FOR BENCHES.**—In answer to Mr. Wood of Fishkill, N. Y., would suggest black walnut as the best wood we have ever tried for benches. I put in a bench of this wood that stood for 12 years and was as good when taken out as the day it was put in. This wood, like cypress, is hard to get in some localities and is also high priced. Have found Georgia pine to be a No. 1 wood for any part of a greenhouse. Why not try slates for bench bottoms? They will last, and if properly put in will not break down easily or get out of repair. Where wood is used we have found it a good plan to dress all lumber used and apply a good coat of raw crude petroleum with a common paint brush, this is a wonderful preserver of wood. We find gas pipe the best bench supporter; be sure and have a good solid foundation so benches can not sag. Should like to hear the experience of some of our brother florists upon this subject.

Richmond, Ind.

F. W. BEACH.



## Cultural Notes.

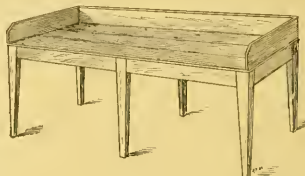
Plants grown for the production of large blooms will, in some instances, where struck early in December or late in November, and owing to the premature ripening of the first break in some varieties, be now showing a second bloom-bud, this freak will cause a short stoppage in the growth of the shoots upon such plants, and ultimately the plants will develop additional growths to the extent of six or more upon each main stem. To the inexperienced cultivator this is at all times a puzzling phase in the growth of the plant, the difficulty to him being to know how many of these new shoots to retain for future flowering, and which to remove, and when the operation should be made. Where the object is to obtain the largest flowers in all their various qualities, then remove all the young shoots as soon as they can be handled, with the exception of three of the strongest-looking upon each plant. Some growers wait until the new shoots are four to six inches long—in fact until the wood is quite firm, thus rendering it necessary to use a knife when removal is decided upon. This method cannot be recommended, as it is an unwise action to allow these superfluous growths to rob the main shoot, and then to cut off at last. It is far better to remove the flower-bud directly it appears, and pinch out the shoots as soon as they can be handled. Pay strict attention to making the points of each shoot secure to the stakes to prevent loss by unforeseen circumstances, as in the case of those plants with only three stems, if any are broken it is a serious matter. Continue the removal of suckers.

Black fly is unusually troublesome during this hot weather and attacks the points of the young growths. If this pest is not destroyed, the tender leaves are soon crippled, and the points not only become disfigured, but receives a serious check. Incessant attention to dusting the parts affected with powder in the evening and vigorous syringing in the morning will remove the insects, but in stubborn cases dipping of the points of the shoots in tobacco water may be found necessary. This is easily accomplished by bending the points down gently and immersing them in a shallow dish or pan held in the left hand, which contains the decoction. Care must be used in bending the growths, as, being brittle, they are liable to snap off.

The branches of the Pompons, single and other varieties grown in bush form, will now require some support. They cannot be finally staked at present, as their growth is not complete. In order, therefore, to prevent the branches being broken, three stakes placed in the pots in a triangular form, and matting tied loosely to these and at the same time round the outside of the branches, will prevent the plants being injured until the stakes can be placed to the stems in whatever form of training is desired. In the case of larger plants four stakes will be necessary. Those planted out, in whatever position they may be in, will now require copious waterings, and if not

already done, a mulching of some short manure, such as that from a spent mushroom bed, in order to preserve the foliage in good condition. This mulching will assist to keep the roots cool and reduce the quantity of water required to a minimum. A similar mulching applied to the roots of those plants growing at the base of walls will assist them in a like manner. Such plants will now be breaking into additional growths, which should be thinned and regulated according to the space at disposal. From four inches to six inches apart is a suitable distance for the branches of the large-growing kinds, and closer for those of Pompons and single varieties. When the shoots are kept nailed to the wall, the foliage quickly rights itself, and at all times presents a neat appearance, but when this is deferred for a time the branches fall about for want of support, and when this is attended to their appearance is somewhat marred for a time.

Continue the tying and training of specimen plants as the strongest branches make progress, remembering that it is



OUT-DOOR POTTING BENCH.

far easier to get them into position while they are young and pliable rather than when the wood is ripe, and consequently more liable to be broken in the operation of bending. During the prevailing hot, dry weather very vigorous syringings over the foliage in the evening will be of much service towards keeping the plants in good health. For this the hand syringe must be used, as by no other means can the plants be thoroughly drenched. The plants set apart to produce the latest supply of blooms will now require the final pinching of the shoots. Those plants that were struck in February will be the most suitable for supplying flowers at the end of December and early in January. It is not wise to grow a large number of kinds, but rely rather upon a few sorts that are known to flower late. In the extreme south of England it is not so easy to have chrysanthemums late as it is farther north, therefore the selection of varieties must be confined to those which are naturally late, and with judicious treatment of the plants flowers can be had at the times named. One advantage possessed by those residing in the south over those living farther north, as far as late blooms are concerned, is the fact that they can leave their plants with safety out of doors longer than can the northern growers. For those who have such plants in stock I name a few of the best for late blooming. The list is short, but it is much better to grow a goodly number of the sorts that are really late flowering than to grow a quantity merely for the sake of variety. Princess Teck, Hero of Stoke Newington, Meg Merrilies, Ceres, Grandiflorum, Ethel, Fair Maid of Guernsey, Miss Marechaux, Thunberg, Mrs. C. Carey will be found the most useful for producing flowers up to Christmas and even later.—*E. M., in London Garden.*

## Fragrant Chrysanthemums.

As yet varieties of these flowers that possess fragrance are few in number, and it is a pity that more are not scented, as such an addition would add much to their worth as cut flowers when used for room decoration. The only fragrant sorts that I know are the undermentioned. The first position must be given to the single variety Mrs. Langtry, a pink shade of color; it possesses the fragrance of violets in a marked manner, quite sufficient to perfume a whole house from a few plants placed therein; it is also free in flowering. Patience, another single variety, is scented, but in a less degree. Progne and Dr. Sharpe, both reflexed varieties, are highly perfumed, the former bright amaranth in color, the latter magenta-crimson, is wonderfully free, making one of the best specimens of any section. These two if grown for their perfume alone should not be had in bloom early, as flowers produced from early crown buds are often deformed and rough in the petals; the color also is not so rich, nor is the fragrance so powerful as when terminal buds are selected. Dick Turpin, Anemone Pompon, bright magenta, with a yellow eye, is dwarf in growth, flowering freely, and possessing a powerful violet fragrance. These are the only varieties which I am acquainted with notable for fragrance of their flowers.—*E. Molyneux, in Journal of Horticulture.*

## Potting Bench.

The great convenience of a portable potting bench when lifting plants from open ground does not seem to be thoroughly understood by many florists. We give an illustration of a convenient bench which can be taken right into the plat where plants are being lifted. By its use plants may be potted right on the spot and the chances of the roots being long exposed to the air, greatly diminished. It is often the case where plants are lifted in the field and carried to the houses before being potted, that the vitality of the plant is greatly reduced by drying of the roots, which by this means can be avoided. Careful attention to these little points go far toward making the best success in plant growing.

## Timely Suggestions.

Smilax should be planted this month. Plants from 2-inch pots will make good strings by November, if given the benefit of rich soil and daily syringing. Quite as good smilax, however, can be cut from last year's plants, as from that freshly planted. In the latter case let all the old stems be cut from the surface of the ground, and as the young shoots grow, watch the growth that it does not become entangled. A half inch of rotten manure placed as a mulch, will prove beneficial. Smilax will be better for a slight shade during the hot months. Thrips, at this time, are frequently found in abundance, and unless great care is observed, it will be found impossible to eradicate them. Let "fir-tree oil" be used, according to directions, upon their first appearance, and no difficulty will be then experienced in handling this tenacious pest.

Poinsettias and bouvardias are better placed in their winter quarters before September. They can be planted out upon the benches when needed only for cut flowers. Poinsettias require a rich soil and plenty of manure water to encourage large heads; bouvardias, also,





NARCISSUS LEDA

will bear occasional doses of the liquid. Watch for mealy bug on both these plants, and when noticed, syringe heavily with any good insecticide.

Callas will need potting this month. Shake all the old soil from the bulbs, pot in rich compost, and stand upon ashes outside until the approach of frost. A 7-inch pot will be found large enough for any sized bulb, if the smaller ones are pulled off each year. Calla flowers have such good keeping qualities, and are so easily grown that it is a wonder we do not see the plants cultivated in larger quantities. Treated in the way recommended, and given a sunny location through the winter, several crops of flowers may be confidently expected. They do not need much room, and the pots may be set close together, it being a great mistake to plant them out. This method produces larger leaves and larger flowers, but nothing else is gained. In fact, medium-sized flowers are of more service to a florist than larger ones. If it is desired to increase the stock, the small bulbs can be planted in boxes and grown through the winter under the benches. By the following year they ought to be flowering bulbs. Green fly is apt to be troublesome to these and all other lilies, but early and frequent smoking will keep the plants clean.

A. E. W.

**BENCHING CARNATIONS.**—Did any of the readers of the FLORIST ever try planting young carnations on the benches in early spring, for winter bloom? Last May we planted out one-half of a 75-foot house in this manner; the plants were quite small when planted and for some time did not seem to make much headway, but now they bid fair to make splendid plants, being far ahead of those planted in open ground, two weeks earlier. The plants have been pinched back several times and are breaking out wonderfully from the base. Some one suggested that carnations would not do well under glass in summer on account of the intense heat, but our little bench so far does not verify their statements. If any of our friends have ever tried this let us have their experience and we will report later how we succeed.

Richmond, Ind.

B.

**THE HOLLYHOCK DISEASE.**—This has been found in a fourth locality—Cambridge, Mass. Every grower of hollyhocks should be on the alert to detect the disease if it appears on any of his plants and destroy the affected ones root and branch. By prompt action in this manner the pest may be eradicated before it has a secure hold in this country. Look to it that the disease does not find a harbor in your place.

## Narcissus Leda.

We have here a reintroduction of much beauty, either when grown in a bed or in a pot, for greenhouse decoration. Mr. Hartland, to whom we are indebted for the excellent photograph from which the engraving was taken, says of it in his list of daffodils, 1886: "This fine distinct daffodil has been certified and renamed at South Kensington, spring, 1886. It has been reintroduced from Ireland as a remnant of old gardens, and no doubt was known to Parkinson as one of the true great tortuose white Spanish forms. Perianth pure white, twisted, and shorter than trumpet, which is pale sulphur, changing to snow-white."—*Gardeners' Chronicle*.

## The Education of Gardeners.

I am glad to see this most important question handled so plainly as it has been in recent issues of the FLORIST. That a large majority of the profession is lacking in education is undoubted, and I hope that this talk on the subject will stir up the young men, and the old ones too.

If we wish to see the profession placed on the level where it belongs, we must send out better representatives than the majority now are. We need scientific men as well as practical gardeners, and the fact that a man is a scientific gardener does not necessarily imply that he is not practical as well. There are hundreds of so-called gardeners who are a disgrace to the profession; they have about as much right to the title of gardener as they have to use LL. D. after their name.

I hope to see the day when the Society of American Florists will be the means of establishing a horticultural college where every energetic young gardener may have a chance to properly complete the first page of his life study. To secure admission he should pass a proper examination as to a knowledge of the practical details of the business, and before graduating he should pass a thorough examination on the subjects which have been treated upon during the course, which may not exceed six months. While we could not expect a finished gardener as the result, it would lay the foundation for future self-education; it would bend the twig of thought in the right direction.

Graduates from such a college would be prepared for work that the journeyman of the present could not undertake, and they would soon supplant the inefficient men now so plentiful. This occurs to me as the best way to handle this matter.

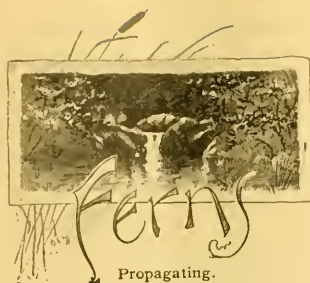
H. A. SIEBRECHT.

**A SUFFERER**, should try a little—now mind a little—Philadelphia Phosphate and we think the grub worms will move over the fence into the next door neighbors. Care must be taken not to get it too strong where colons and geraniums are planted, as it will often hurt this class of plants, but as a general rule we find it a good insect exterminator and a most excellent plant food, especially for roses. Grub worms have a very strong dislike to anything of a salt nature. We planted a piece of new ground to carnations two seasons ago which was badly infested with this pest and at the suggestion of an old market gardener who had tried the same remedy on cabbage plants, we gave it a trial on a few rows at first, and then on the whole patch; we soon found the grub worms gone and can not conceive of any thing else that put them to flight.

Richmond, Ind.

F. W. B.





With regard to the composition of the soil on which the spores of ferns are to be sown, there are many different opinions, but I prefer a mixture of good yellow loam, peat, and sand, the whole sifted fine before using. Many choose a rough surface on which to sow the spores, and under these conditions they germinate just as well, but when necessary to be pricked off, that operation is rendered far more difficult if they are growing on lumpy soil. Before using, the soil should be thoroughly baked, in order to destroy all signs of life in it, whether animal or vegetable, for if this is not done, very frequently on the soil being placed in a position favorable to the growth of the spores, the whole surface will be overrun with conifers. This evil will be greatly lessened if the soil is baked beforehand. Whatever sized pots are used for sowing the spores in, they must be perfectly clean, and filled to within 2 inches of the top with broken crocks, then over these may be placed a thin layer of fibrous peat, and after that the above-mentioned compost. This must be pressed down moderately firm, and when finished should present a perfectly smooth and level surface. After that a good watering, or rather a succession of waterings, sufficient to give the entire contents of the pots a thorough soaking, must be given, and when this is the case all is then ready for the reception of the seed. The fertile fronds required for sowing having been gathered a little time previously, and laid in white paper in a dry place, will discharge their spores, which, owing to the color of the paper, are very easily seen. All that is then necessary is to sprinkle the fine dust like spores as thinly as possible on the still moistened surface of the soil, to which they will readily adhere. They will then need to be so situated that a uniform state of moisture is maintained, and to ensure this a good plan is to place them in a close propagating case, and, in addition, to lay a pane of glass over each pot. Thus treated they will need but very little water before germination takes place, but should they become dry, the better way to moisten the soil is to stand the pots in a pan of water sufficiently deep to reach about half-way up each pot. The moisture will, in this case, percolate through the whole of the soil, and thoroughly moisten it, without in the least disturbing the surface. As soon as the young ferns make their appearance in the shape of a moss-like carpet of green on the soil, the glass laid on the pots had better be taken off, and at the same time each pot should be examined and any moss that may be forming on the surface at once removed, for if it is not done directly, the future growth of the moss and fern becomes inseparably associated, and in the end the moss will choke the remaining vegetation. Even after the glasses are removed

from the pots, the young ferns make more satisfactory progress if kept in the humid atmosphere of a propagating case, but constant supervision will be needed to see that they do not damp off, for should any signs of decay make its appearance a certain amount of air must be given to the case by tilting the lights, and if that does not stop the decay, or the spores become too much crowded, they must be pricked off.

To succeed with this operation, the pots and soil must be prepared as for seed sowing, except that, instead of being pressed down moderately firm, it is left quite soft, though level at the top. Then with a pointed stick take a small cluster of the growing spores and place them in position on the surface of the soil in the newly prepared pot. The soil being so light, a gentle pressure with the forefinger will keep them in position without in the least bruising the growing spores. After a pot is filled with these little tufts, each standing well clear of its neighbor, the



IRON PURLIN.

whole should receive a good watering through a fine rose, which will settle everything in its place. After this the pots may be returned to the case, when, if the operation has been carefully performed, they will grow away without check.

Some kinds are far more liable than others to damp off during their earlier stages, the maidenhairs being, as a rule, among the more vigorous, while *Pteris tremula*, which is such a strong-growing kind when established, is, when first germinating, as subject to decay as any. Many kinds will need pricking off two or three times before fronds are pushed up; indeed, from one good clean pot of young seedlings in its first stage it is often easy to make a dozen pots all full of growing plants. By the time the fronds are seen, the curious Liverwort-looking prothallus of a fern will, in some cases at least, spread out to quite a considerable size and produce several young plants around the edge. The spore of a fern differs widely from the seed of a plant, as this latter contains the future plant in embryo; while in the case of a fern the spore may be rather regarded as a flower, for the organs of fructification are undeveloped when first sown. Owing to this, the possibility of raising hybrid ferns has been frequently demonstrated, the mingling of the spores of two distinct species or varieties before sowing having resulted in a very mixed crop, the greater part of which would be simply a reproduction of the two kinds sown, while not unfrequently some individuals, exactly intermediate in character between the two, will make their appearance. This is especially observable in the genus *Adiantum*, for where several kinds are raised in this way, some very curious forms generally result therefrom. The temperature at which fern spores should be kept when sown will, of course, de-

pend upon the natural requirements of the plant, but, generally speaking, the better plan is to keep them a little warmer than the temperature required for the adult plant.

**DIVISION.**—This in various ways is also available for the propagation of many ferns, especially those of a tufted growth, such as several kinds of Maiden-hair, the smaller *pteris*, and a host of others. Another class amenable to this mode of increase is represented by those kinds with creeping rhizomes, such as *gleichenias*, *davallias*, many *polypodiums*, and others. This latter class, even when the rhizome is above the surface of the soil, frequently produces roots on their own account, so that no further care is necessary than to take them off, and after potting place them under conditions favorable to growth. In the case of those of a tufted character, the usual plan is to shake them out of their pots as carefully as possible, and then divide the plant to the extent required. Any that may be obtained in this way are all the better if kept close for a little time till root action recommences.

This method was at one time much employed for the propagation of the cuneatum section of *Adiantums*, but those raised from spores are now generally preferred, especially where needed in the shape of small plants, as they are when young better furnished and of a more pleasing outline than those obtained by division. A great many ferns, again, are prolific, that is to say, they produce perfect plants on the fronds, and in that case all that is necessary is to bring them in contact with the soil under conditions favorable to growth. This may be effected in two ways, either by bending down the fronds while still on the plant, or cutting them off and pegging them down on pots of soil. In this latter case especially they are better if kept close for a time; indeed, most ferns make far more rapid progress if nursed during their earlier stages.

One caution to be particularly observed in sowing fern spores is that owing to their minute character and lightness, they float readily in the air, so that should several sorts be sown at one time the pots required for any one kind must be isolated, and the actual sowing carried out at some distance from the pots prepared for others, as if this is not carefully followed out a confusing mixture will in most cases be the result, and then the stronger growing kinds are very liable to destroy the weaker ones. Another precaution is to wipe the hands on a towel after each sort is finished and before commencing another. A good illustration of the way in which the spores of ferns are transported from place to place is to be observed in most structures devoted to their culture, as young plants may be seen springing up in all directions, and often clothing a damp wall or some such spot with quite a mass of greenery. Though many kinds grow thus readily, there are, on the other hand, numbers that require very great care to raise them successfully from spores.—*T. in London Garden.*

#### Iron Purlin for Greenhouses.

We give an illustration of an iron purlin used in the new greenhouses of Currie Bros., Milwaukee, Wis. This style of purlin is certainly an excellent one, it presents but little obstruction to light, its shape gives it great resistance to pressure and it will undoubtedly outlast wooden ones many times. The pur-





QUEEN VICTORIA'S JUBILEE BOUQUET

lin is screwed to each rafter from the under side. Each pipe support is capped with a block of wood which fits into the triangular purlin. By substituting a piece of iron for the wood this part of the frame would be almost indestructible. These houses are also provided with ventilators which open at the upper end as recommended by Mr. May in previous issues of the FLORIST.

#### Victoria's Jubilee Bouquet.

We have reproduced the accompanying engraving of the Queen's jubilee bouquet from the *Gardeners' Chronicle*. It must certainly have been a gorgeous affair, being composed entirely of the choicest varieties of orchids and some five feet in height. It was arranged by Mr. F. Sander, the flowers being contributed from different private establishments throughout England, in addition to a large quantity cut at his own place.

HAMILTON, ONT.—Florist Thomas Kilvington's little daughter, aged 6 years, was accidentally shot and killed by a playmate of the same age the evening of July 27.

#### Boston.

The excursion of the Gardeners' and Florists' Club took place on July 26, at Rocky Point, R. I. The weather was perfect, all arrangements for a good time had been carefully attended to, most of the florists' establishments in the city had closed up for the day in honor of the occasion, and as the special train bearing 250 excursionists sped along from Boston to Providence, a happier crowd could not have been found. Every one seemed bent on having a holiday which would be a complete respite from business responsibilities and cares. The sail down the Providence river was thoroughly enjoyable and when at noon the party arrived at its destination, with appetites all ready for dinner, every one seemed glad he had come, and many regrets were expressed by those having wives or lady friends, that the club had voted to exclude those of the other sex from participating in the excursion.

But unfortunately this pleasant state of affairs did not last long. The Rock House, a small hotel on the rocks, above the steamboat landing had been assigned as the headquarters of the club for the day, and thither the excursionists wended

their way upon the arrival of the boat. As they crowded up on the front piazza or balcony there was a crash; the balcony had given way and thirty or more of the party were suddenly precipitated to the rocks below, a distance of about twelve feet.

Scarcely one who fell but had bruises and other injuries of a more or less serious nature, but all were able with the assistance of their friends to scramble out, with the exception of Mr. John Galvin, who was pulled out badly hurt, from the pile of rotten boards and timbers which was all that remained of the fallen balcony. The injured was tenderly carried to a room in the hotel where he was attended by a physician who fortunately chanced to be on the ground. It was found that one thigh and a rib was broken. He was taken to his home in Boston as quickly as possible. Mr. Galvin is a general favorite and on this account as well as his age he has the deep sympathy of his many friends. He is upwards of sixty years of age but his natural cheerfulness and buoyancy of spirit stand him in good stead and he will no doubt pull through all right in time. The criminal carelessness of the company which owns the grounds, in allowing such a rotten structure to be used is likely to cost them a considerable sum as already about twenty-five of those who fell have declared their intention of demanding indemnity for their injuries.

After the excitement attending the accident had abated, the programme arranged for the day, including running and jumping matches, base ball games, etc., was carried out, but nobody was in a humor to enjoy himself and none was sorry when it was time to start for home. The game of base ball between the gardeners and the florists resulted in a victory for the former, and the prize of \$10 for the same was eagerly gathered in. Mr. Crowley won the fat man's race, much to the disgust of Mr. Warren Ewell and Mr. M. Norton, both of whom had been industriously training for the event.

The regular weekly show of the Mass. Hort. society on Aug. 6, was well attended and was an unusually good exhibition. Mr. Wm. Martin deserves great credit for his collection of superbly flowered achimenes, and for a group of *Eucharis amazonica* which could scarcely have been improved upon. They were in 8-inch pots and averaged twelve large spikes of flowers to the pot. A collection of hardy philoxes shown by E. Shepard & Sons has never been excelled here and James Cartwright's display of gladioli filling row bottles—well, let some of the crack New York gladioli men come up here and try to beat it.

The irrepressible Mr. C. M. Atkinsou was on hand with a plant of *Brassavola Digbyana*, and was the center of an amused and admiring throng of the boys, who were attracted by the singular formation of this peculiar and interesting orchid.

W. J. S.

#### Orchids at Hamilton College Centennial.

President Cleveland and his charming lady honored Hamilton college, Clinton, N. Y., with their presence at the centennial celebration. Mrs. C. received at the spacious residence of Mr. Williams which was very handsomely decorated for the occasion. Baskets and bouquets of choice roses were in profusion, as were also many kinds of choice garden flowers.

The lady of the White House was

presented with a massive and magnificent bouquet of orchids by a lady friend. The bouquet consisted of hundreds of Cattleyas Mendelli, Mossiae, Dowiana, Gigas, etc., several varieties of *Erides* and *Odontoglossums crispum* and *Vexillarium*, showing conspicuously through the gaudy cattleyas; the trimming was of *Oncidium flexuosum* and *Adiantum Farleyense*. The bouquet was so much appreciated that Mrs. C. ordered it sent to Washington. The orchids were grown and the bouquet arranged by florist Mathews of Utica, N. Y.

#### The Toronto Hort. Society's Annual Flower Show.

This show occurred July 20 and 21, and proved to be a very successful affair. The exhibits on the whole were an improvement on former years, showing the increased interest taken by our local and outside florists, although I believe a better feeling would exist amongst the exhibitors if the directorate of the exhibition consisted more of practical men.

Too much praise cannot be said of our worthy president, Mr. Geo. Vair, who was indefatigable in his efforts to promote satisfaction and see every person thoroughly pleased, but the efforts, of course, rest too much on one good man, whereas it could be very well divided.

A large collection of plants was shown by Mr. Watkins, head gardener of the Horticultural Gardens, consisting of some of the largest specimens of palms, etc., and was generally admired, being tastefully grouped in the center of the hall. A very pretty specimen of crape myrtle was exhibited by Mr. Geo. Vair, it having received the first award.

In the cut flower department Messrs. Manton Bros. and Thos. Clinkinbroom carried off the largest number of awards. Particular mention must be made of the very artistic design got up by Manton Bros. The design was "Rock of Ages," the flowers used being double white stocks and double white hollyhocks, balsams and lilies. Another design of particular merit was a wind-mill design made up by Cotterill Bros., Deer Park. I noticed this prominently placed among the awards, and really it was worthy of the attention it attracted, requiring over a bushel of flowers.

HERMAN SIMMERS.

THE HOLLYHOCK DISEASE has been found by Prof. J. E. Humphrey at a third locality, a garden at Nahant. A. B. S.

#### A NEW FLOWER-POT.

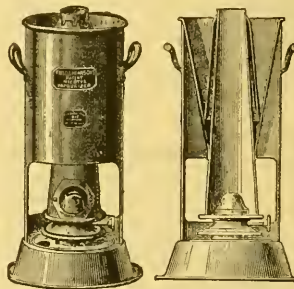


It is intended for window plants, and may prove of value to amateurs who keep plants in this way. We understand that pots will be on exhibition at the Chicago convention.

#### Nicotyl Vaporizer.

Mr. Benjamin Field sends us a sample of a new fumigator entitled Field & Hearson's Nicotyl Vaporizer, which is constructed upon the principle of converting a liquid strongly impregnated with nicotine into a vapor, which is diffused through the house, and is said to destroy aphides and other insects very readily. It is thus described: "The apparatus consists of an annular vertical chamber, into which is dropped a conical cylinder, open at the

top and bottom. The introduction of this open-ended cylinder divides the interior of the chamber into two annular portions: a smaller one next to the centre flue, which, for the purpose of this description, we will call the super-heater, and an outer larger one, which we will call the boiler. Below the vertical opening in the centre of the chamber, which we will hereafter designate the lamp chimney, we arrange a lamp burner and a reservoir for containing the paraffin oil, by the means of which the apparatus is heated. The boiler being filled to a certain height with the nicotyl to be vaporized, and a certain measured quantity of oil poured into the reservoir, the lamp is lighted and allowed to burn until the whole of the oil is consumed." It is well constructed and worthy of a trial.—*Journal of Horticulture.*



NICOTYL VAPORIZER.

#### Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1886.

Aug. 15.—Tem. 65, 76, 80. Wind N. to S.E. Sunday.

16.—Tem. 70, 92, 75. SW. to NE. Placed in frame cuttings of *Alternanthera versicolor*. Cut down hollyhocks and picked off dead geranium flowers. Tied up cannae blown down by storm. Trimmed foliage beds.

17.—Tem. 72, 72, 67. NE. Same as yesterday. Carpenters repairing houses.

18.—Tem. 72, 76, 69. NE. to N. Same as yesterday.

19.—Tem. 69, 82, 73. SE. Planted out coleus and *Cineraria* cand. between hollyhocks, celosias, vincas and gomphrenas. Picked seeds and trimmed beds.

20.—Tem. 70, 83, 81. SW. Potted out of frame cyclamens which had been planted out. Trimmed and cleaned beds.

21.—Tem. 73, 96, 89. SW. Transplanted little acacias. Now watering freely outside.

22.—Tem. 79, 82, 74. W. to N. Sunday.

23.—Tem. 70, 74, 69. N. Commenced potting from frame rooted cuttings of *Alternanthera paronychioides* major, placing three cuttings in a rose pot. Trimmed elevated carpet bed. Replaced broken glass in houses.

24.—Tem. 71, 80, 70. E. Continued potting and plunging *Alternanthera paronychioides* major. Cleaned and trimmed beds. Boiler-makers repaired boilers.

25.—Tem. 74, 82, 78. E. Finished potting and plunging cuttings of *Alternanthera paronychioides* major (securing 13,300 plants), and commenced potting and plunging rooted cuttings of *Alternanthera versicolor*. Cleaned and trimmed beds.

26.—Tem. 74, 84, 79. S. to E. Continued work commenced yesterday.

27.—Tem. 75, 87, 80. SE. to S. Finished potting *Alternanthera versicolor* securing 7,000 plants. Cleaned and trimmed beds.

28.—Tem. 78, 94, 80. W. to SW. Cleaned beds and frame yard. Watering freely.

29.—Tem. 68, 80, 75. SE. to N. Sunday.

30.—Tem. 64, 74, 68. NW. Glazing houses and mending pipes. Transplanted cannae for decorative purposes.

31.—Tem. 54, 68, 62. NW. Transplanted *Cineraria hybrida* into 3-inch pots. Picked celosia seeds. Mended pipes, glazed houses and trimmed beds.

#### Trade Notes.

UNIONVILLE, PA.—Jos. Renard succeeds Thos. F. Seal, florist here.

BALTIMORE.—Henry Frederick has built a new house 16 x 100 for cut flowers.

ANN ARBOR, MICH.—Cousins & Hall are building two rose houses and putting in a new boiler.

BAV CITY, MICH.—John Irvine is just completing two more rose houses, 100 x 35 and 100 x 22 respectively.

LANCASTER, PA.—Geo. W. Schroyer has opened a down town store to accommodate customers for cut flowers, seeds and plants.

PEORIA, ILL.—The following florists are building additional rose houses here: Wm. Cation, one 72 x 30; Cole Bros, three 100 x 10 each and Louis Miller, one 50 x 16.

BLOOMINGTON, ILL.—The Bloomington Phoenix Nursery Co. have two rose houses under construction each 200 x 12 and are putting in two 50-horse power boilers. J. D. Robinson has just completed a new rose house put up in first class shape.

MINNEAPOLIS.—Trade is very dull. Fred Bush is building three more large houses for vegetable forcing. His old houses are to be refitted and the whole heated with steam, making the most complete vegetable forcing place in the northwest. J. S. Gray is to build two new houses this fall. The C. A. Smith Floral Co. are repairing their old houses and changing their pipes to use steam. One steam boiler heating four houses did so well for them last year that hot water is to be all replaced by steam. We are having the "hottest summer known in many years" here. Plants in the yards are beginning to show the drought.

ST. PAUL.—Trade very dull this season. The poor quality of all flowers, due to unfavorable weather, is probably one of the reasons. So much labor has been required to repair damages from last spring's hail storms that very little in the way of extensions is being done. C. F. Lemke of Seventh St., has added somewhat to his city store and now has a very nice place. There has been a rumor afloat to the effect that a new firm intended to erect a large number of houses but I have not yet seen any indications of a commencement of operations. Robert Blumm, of West St. Paul, died July 13, at the age of 46 years. He was one of the quiet but none the less useful members of the profession. He was a native of Germany and I believe spent his first



years in this country in Baltimore where he is probably still remembered, though he has been a resident of St. Paul for the past fifteen years. He was a member of the S. A. F. Wm. Buckindorf, one of the pioneer florists of Minneapolis recently sold his property on Seventh Ave. south for \$30,000, and contemplates making a long visit at his native place in Germany. It seems to be difficult to get the trade in this section awakened to the value of the meetings of the S. A. F. and these two cities of the northwest will again be scantily represented at the coming meeting.

### SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany all orders.

**SITUATION WANTED**—By a competent German florist; married; 18 years' experience. Private place preferred. Address, N. 16, care Am. Florist.

**SITUATION WANTED**—As foreman or assistant florist by experienced man; single; best references. Address, L. H. B. No. 38 Cooper St., Camden, N. J.

**SITUATION WANTED**—I will be open for engagement Sept. 1st, in capacity of foreman and propagator in a large commercial place. Address, EASTERN FLORIST, Red Oak, Iowa.

**SITUATION WANTED**—By a first-class rose grower, to act as foreman in a retail place; 7 years' experience in the east; single. Address, W. W. V., care American Florist.

**SITUATION WANTED**—By a steady, married man of forty; well up in all parts of the business; as gardener either in a first-class commercial or private place. Address, M. J. K., Dinsmore Place, Mass.

**SITUATION WANTED**—By a young lady, 20 years, as book-keeper in a florist or nursery establishment. A good pen and type-writer; also a competent stenographer. Address, J. M. F., 35 Campbell St., Delaware, Ohio.

**SITUATION WANTED**—By a single man, German, with 5 years' experience; 25 years of age; as rose grower, propagator and general cut flowers; good references; will take charge of place near Cleveland or Fishburg. Address, FLORIST, care Am. Florist.

**SITUATION WANTED**—Position in a commercial place as manager or foreman; understands the business in all its branches—growing cut flowers, propagating, &c. Good references. Address, 321 Webster Ave., Scranton, Pa.

**SITUATION WANTED**—As gardener florist; Scotchman, single, age 28; private or commercial, is thoroughly experienced in the cultivation of roses, stove and greenhouse plants, tineries, fruit and flower garden, and all other branches of the profession. Five years in this country. Address, WM. ROBERTSON, Ridgely Park, N. J.

**WANTED**—To hire from 2,000 to 10,000 ft. of glass, unstocked, with 100 bulbs of Boston. Address, GARDENER, Chesham, N. H.

**WANTED TO LEASE**—Small greenhouse place in good running order, in the neighborhood of Chicago. Address, F. 6, care American Florist.

**WANTED**—A number 15 or 16 Hittings Corrugated Fire Box Boiler. Must be guaranteed to be in perfect order. Address, stating price, A. M. & J. B. MCRODCH, Pittsburg, Pa.

**WANTED**—A competent Seedsman for retail department; position permanent to right man. State experience, salary, expectations and references. Address, A. P. O. box 249, New York City.

**WANTED**—A good, reliable man to either work for wages or take an interest in a business. Can make from \$1,000 to \$2,000 per year clear out of business. Address, M, care American Florist.

**WANTED**—On a first-class private place, two young single under gardeners, must have a fair knowledge of the hotting and curing of fine specimen plants; and must have good references. B. D. T., Waverly P. O., Baltimore Co., Md.

**WANTED**—A single man that understands the care of greenhouse, propagating and growing of plants in a small commercial place near New York. Address, with references, stating wages expected. THOS. A. MIDDLETON, 110 Clark St., Jersey City, N. J.

**WANTED**—1000 florists to send us a trial order for flower pots. If you do not want a crate of all one size, send us \$5.00 and state what sizes you want and we will fill it. See our "ad." Send for price list and free sample. SYRACUSE POTTERY, Syracuse, N. Y.

**TO EXCHANGE**—A few hundred Lutes Oxalis bulbs for hardy bulbs. Correspondence solicited. Address, MRS. ANN C. HURD, Havana, Ill.

**TO SEEDSMEN**—WANTED—A man thoroughly acquainted with the Flower Seed trade and Catalogue work, in a prominent city, to take entire charge of retail store. Liberal salary paid and a permanent engagement to a suitable party. Address SEEDSMAN, care Am. Florist, Chicago.

**FOR LEASE**—An old established nursery and greenhouse business, in the best city in Iowa. Four acres small fruit, grounds inside city limits. Street cars pass by the place; a rare chance. Correspondence solicited. L. J. BOX 108, Cedar Rapids, Iowa.

**FOR SALE**—Greenhouses and stock, in fine condition, located near Chicago, or would take a good partner at reasonable price. For particulars address Q, care American Florist, Chicago.

**FOR SALE**—150 ft. 4-in. pipe, eight quarter bends, two short double hubs, in perfect order, used only one season. Address, W. V. WALLACE, Champaign, Ill.

**FOR SALE**—Most desirable floral business in the West. Splendid local and shipping trade. Population of city 40,000. Sole reason for selling, failing health. Party will be at Chicago convention. Address, WESTERN, care American Florist.

**FOR SALE**—Greenhouse and stock, lot 105 x 140 ft. in town of 25,000 inhabitants, 13 miles of Philadelphia. Address, J. C. A., 248 Chestnut St., Philadelphia.

**FOR SALE**—Four large greenhouses and contents, with five year lease of lot 100x125. Three living rooms in connection with greenhouses. Place located in the city of Chicago. A fine retail stand. F. C. G. SCHMIDT, 104 Seminary Ave., Chicago.

**FOR RENT OR LEASE**—Five medium sized green-dwelling houses, some hot-bed sash, 84 acres good land, dwelling house, all necessary out-buildings. A good business in flowers and vegetables; 15 years established. Address, E. McNALLY, Anchorage, Ky.

**FOR SALE**—Just building two new greenhouses, and stock of an old florist business for a large trade, for sale cheap. Will sell ground also, or give as long lease as wished, and at very easy terms. Located in a live, booming western city of hundred thousand inhabitants. Address, B. S, care American Florist, Chicago.

**FOR SALE**—Established florist business, paying from the start, in a first-class business town. Greenhouses new, heated by hot water, corner lot 30x130 feet, city water, electric light, telephone, two railroads, population 15,000, and 20,000 more in a radius of ten miles doing their trading here. Business can be rapidly increased. No greenhouse within 25 miles. Owner has a large wholesale business which requires his whole time. Only those meaning business address, A. J. SWALM, Hazelton, Pa.

**FOR SALE OR EXCHANGE**—Some surplus stock of good strong Roses, 800 Crimson Scarlet in 4-in. pots, at \$8.00 per 100; 1,000 in 3-in. pots, at \$3.00 per 100, of Comtesse de La Barb, Bon Silmes, Madame Ducher, Safran, etc. 500 Lantanas (Lemon) in 5-in. and 4-in. pots, at \$5.00 per 100. 300 Smilax in 3-in. pots, at \$4.00 per 100. Will sell or exchange for Hyacinth bulbs. Address, C. K. HOFFMEYER, 255 Spring Garden Ave., Allegheny City, Pa.

## WANTED.

A first-class designer and florist for floral store in Chicago. Good wages to the right man.

Address, M. F. GALLAGHER, Monroe St. and Wabash Ave., CHICAGO.

**PANSIES ONLY!** The grandest collection ever offered, including ALL the latest NOVELTIES. Our Seed is warranted to be FRESH, PURE and strictly FIRST-CLASS. Send for new Circular and Special Price List to the Trade.

ALBERT EBY, Douglaston, N. Y.

## FOR SALE.

### THE CUTS

USED IN ILLUSTRATING THIS PAPER.

Write for prices on any which you have seen in previous issues and would like.

AMERICAN FLORIST CO.  
CHICAGO.

## OUR SPECIALTIES.

## NOVELTIES IN ROSES AND OTHER PLANTS.

—) ALSO (—

FLORISTS' STOCK FOR FORCING.

HILL & CO.,  
RICHMOND, IND.

## THE NEW ROSES,

American Beauty, Bride, Her Majesty, W. F. Bennett, Papa Gontier. Also good plants of the best leading varieties of Teas, H. Teas, H. Perpetuals and a general collection of greenhouse and bedding plants at a very low price. Send for prices.

JACOB SCHULZ,  
1325 E. Broadway, Louisville, Ky.

## ROSES. —:- 20,000 YOUNG ROSES

In 2-inch and 2½-inch plants in fine condition of the following varieties:  
American Beauty, The Beauty, Mermont, Perle, Niphetos, Bennett, Pierre Guillot and La France. For prices, apply to GARFIELD PARK ROSE CO. 1688 W. MADISON STREET, CHICAGO.

## ROSES.

Large Fine Plants from 4-inch pots.

Catharine Mermont.....	Per 100
Perles, Niphetos and Mme. Watteville.....	\$10.00
	12.50

### SMILAX.

Strong plants from 2-in. pots, \$3 per 100; \$25 per 1000.

## THEO. BOCK,

Cor. 10th & Heaton Sts., HAMILTON, O.

## ROSES.

We have several thousand extra fine plants grown in 4-inch pots from two-eyed cuttings at the following low prices:

Perles and Niphetos.....	Per 100
Mermets and La France.....	\$12.50
Bon Silene and Safran.....	10.00

J. L. DILLON, BLOOMSBURG, PA.

## ROSES.

Cooks, Mermets, S. D. Ami, ( 4-inch pots.....	Per 100
Bon Silene, Adam, Safran, ( 3-inch pots.....	\$ 8.00
	6.00
Mad. Watteville, ( 4-inch pots.....	10.00
Jean Siskely, ( 3-inch pots.....	8.00
Cusin, ( 4-inch pots.....	\$10.00 and 15.00
Brides, 3-in. and 4-in.....	
Cooks and Mermets, one year old, strong 4-in. and 5-in. pots.....	\$10.00 and 15.00

I. C. WOOD & BRO., Fishkill, N. Y.

## STOCK FOR SALE.

Perles, 4-inch pots.....	Per 100
La France, ".....	\$12.00
Beauty, ".....	10.00
Sony, d'un Ami, 5-in. pots.....	25.00
" " " " 3-in. pots.....	10.00

These plants are in fine condition, clean and free from mildew.

W. C. GERMOND, Sparkill, Rockland Co., N. Y.

## ROSES.

We can still offer fine plants of the following Roses in excellent condition for planting on benches:

PURITAN,	SOUV. D'UN AMI,
PAPA GONTIER,	CATHARINE MERMET,
THE BRIDE,	BENNETT,
AM. BEAUTY,	BON SILENE,
PERLES,	NIPHETOS,

Correspondence solicited, as we are prepared to quote very low prices on most varieties.

B. A. ELLIOTT CO., Plantsmen,  
Pittsburg, Pa.

## The Cut-Flower Trade.

### Latest Floral Styles.

BY OUR NEW YORK CORRESPONDENT.

Decorations and all ornamentation with flowers are chaste and charming, indicating the thought and efforts of florists to maintain styles clearly defined, and to keep them of a high order. Yellow, pink, white and blue are favorite tints, the latter color being introduced elegantly wherever possible, with pond lilies, larkspurs and the blossoms of *Hydrangea Hortensia*. The first bloom of new stock is now being cut. Niphetos, Perle and Mermet roses are very pretty, and La France and American Beauties are admirable, the only drawback being short stems. The material is excellent for the season. There are Boston pond lilies, Newport lily of the valley, and *Hydrangea paniculata grandiflora* is just opening and will be used extensively as soon as available.

A unique and most graceful feature of room embellishment is the forming of a spray of flowers and foliage on the wall or over mirrors of small flowers. For instance, a cluster of moss rose buds is made on a light wire skeleton of moss and mignonette and pink or white flowers, when the buds are filled in at the point. A large single lily is woven of small white flowers, and several leaves are worked out to adorn the stem. It requires an artist to make up these heroic-sized flowers. The frames must be graceful and divested of all clumsiness.

There is marked simplicity in room arrangements, and there are no novelties for walls excepting the pieces described. The most popular designs are foliage screens, which are placed in dining rooms at each end of the table near a bay window or door leading to the corridor. These screens are made with three and four panels, each panel showing foliage of different color and texture and testifying to the marvelous beauty of foliage and the fascinating effects to be wrought with fern fronds.

Last week Klunder arranged several dinner decorations at Newport. The foliage screens, with their stretch of exquisite greenery, were opened so that the evening twilight from bay windows fell across fanciful reliefs in adiantums, and the breeze from the ocean fanned the foliage. Mrs. Astor's dinner was a pink one. Pink roses, begonias and pink-tinted hydrangeas were arranged in the massive silver dishes which belong to this family. Silver shells and swans, baskets—in fact, all silver dishes are utilized at present for flower holders.

The most fashionable table centers at present are known as "irregular clusters." Lilies, roses and ferns are embedded irregularly in clusters in a large flat oval basket or plaque. Sometimes the shape is an oblong panel. Around these pieces there will be a gorgeous fringing of crotons, which plants, by the way, are used freely and with the highest effect in foliage screens and other artistic work in greenery. Pond lilies are also very stylish for table centers. Pools and water beds of many sorts are arranged on tables to show off the water queen in her natural element. A large cut-glass ship is filled with water and suitable foliage, and in this the lilies are placed so that they lie on the surface. Tin tanks for accommodating pond lilies look very handsome when their sides are covered with ferns and sprayed aspara-

gus. A tall cluster of cyperus is usually placed in a graceful position in the tank. A glorious dinner arrangement was made at the Newport Casino, of marigolds and allamanda. The flowers were put on in the irregular cluster center piece, and the favors were stars and crescents, finished with old gold sashes. Gloxinias are quite fashionable for table ornamentation. Clusters of one color of these are plunged in beds of asparagus, which is a splendid way of displaying this rich flower.

Favors are again in vogue at all entertainments where flowers beautify. Crescents and stars are made up neatly of small blossoms, and the designs are finished with a bow of satin ribbon. The "old shoe" is the newest favor, and is, like the horseshoe and clover-leaf, considered a symbol of good luck. It will probably have a run next season for favors, gifts, and wedding designs particularly, where rice and shoes to toss find their place.

The blue boutonniere is of all others the most stylish. The prettiest made are composed of blue hydrangea surrounded with ferns. All boutonnieres are made circular, and not fan-shaped, as worn last season. Corsage bouquets are more favorite of La France roses than any other flower, unless it is wild roses, which are worn considerably at watering places. One dozen and a half flowers are used, and the bunch made long and loose, so that it extends high up on the corsage.

Hand bunches are no longer made flat, but are very large and round. The most unique are those formed of American Beauty roses with a side cluster of blue hydrangea. They are exceedingly luxurious, and of course very conspicuous. La France roses are much sought for bouquets. They have the blue side cluster, either of larkspur or hydrangea. Hand bouquets of white flowers, lilies or pea blossoms have also a blue cluster at one side. Corn flowers are generally used when the bunch is made of pea blossoms.

Foliage is largely used for gown garniture. Long sprays of ivy are most beautifully applied to silk and crepe frocks, and asparagus is used on tulle and light fabrics. All set designs for ornamentation are dispensed with when foliage is employed for dress trimming. It only looks well when put on in tracteries. Sun hats are trimmed with long sprays of English ivy; this is tied on carelessly, and is a simple and pretty way to ornament straw.

High flaring baskets with tall loop handles are the most fashionable for souvenirs; they are trimmed artistically on the outside with rosebuds and ivy sprays. The effects in filling these baskets are made more on the edges than in the center. I saw Mr. Brower arranging one that was to be sent to Seabright. He used small Mermet rosebuds and a few Malmaisons to fringe one edge, and lilies of the valley and pea blossoms at the other side. The lobes of the baskets were festooned with La France and American Beauty roses. The handle was trimmed with ivy and rosebuds.

The French fisherman's basket has gone out of style, and there will be no more square handles on baskets at present. Jars and vases of rush straw with small side handles, or none at all, are the most in vogue. These have always a sash tied around them finished with a cluster of small bloom, such as lily of the valley or pea blossoms. Only pink and white pea blossoms are used, the red and purple shades having no sale.

Funeral flowers are not ordered in large quantities, but they are of the choicest description. The newest feature is a basket made to fit the top of the casket from where the glass ends to the foot. It is formed of roses and lilies, and is fringed at the edge. The sides of the casket are not covered. It is fashionable to deck the altar suitably when funerals are held in churches. A bank of mignonette was made yesterday on a church altar. On this lay a large flat cross of pink flowers. It was a beautiful arrangement, and all the flowers shown, excepting the casket cover and the decoration of the pew, which was also made with mignonette and La France roses. The favorite style of putting flowers in a church pew is in cushions, with garlands over the head-rests. In ordering funeral flowers the favorite blossoms of the person dead are obtained, if possible, and used to the exclusion of others.

The English style of sending mourning cards is becoming more the vogue here every year. These were made to immediate friends of the deceased—a prominent broker—last week, and with each card, which was delivered by messenger, was presented a bunch of white roses, black pansies and cypress.

The boxes of cut flowers shipped from here are arranged with great care. Considerable time is consumed in making combinations and placing flowers and foliage so that when opened the collection will show at its best.

### New York.

Messrs. Bridgeman and Farley are spending a fortnight of their vacation at Niagara Falls.

Thorley has given his head assistants a month's vacation, with full pay. They received their check before starting. This is the right kind of acknowledgment of faithful service.

Wallace, of Paterson, has a fine show of flowers in his orchid houses.

Broadway florists have their windows and store shelves draped with white tarlatan. No attempt is made at decoration in windows, excepting by those who make a standard display of wire work and baskets.

Peter Henderson & Co. gave an exhibition of gladioluses and dahlias in their store the 10th inst.

Thorley made a pillow that cost \$84 for the funeral of a prominent gentleman last week.

Fred Gordon receives nearly all the orders for flowers from the stock exchange, and is known as the Stock Exchange Florist.

Frank Hamilton may be truthfully termed the church decorator.

WASHINGTON.—A novel floral design was lately made by Freeman. It was a mason's trowel the blade being made of white roses and the handle of white and red roses, the whole trimmed with adiantum ferns.

EARLY HISTORY OF THE HOLLYHOCK DISEASE.—It was first found in Chili, growing upon *Althaea officinalis*, and was first described in 1845. In later years it was introduced into Europe, where it spread rapidly. Its first appearance in England was in June or July, 1873, and in April, 1875, it occurred in Ireland upon plants from English seed. In 1886 it was carried back to the western side of the Atlantic ocean twice to reach the United States.

A. B. S.



**THE AMERICAN FLORIST**

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 Cents a Line, Agate;  
Inch, \$1.40; Column \$14.00.  
Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per  
cent; 12 months, 20 per cent.

No reduction made for large space.

The Advertising Department of the AMERICAN  
FLORIST is for Florists, Seedsmen, and dealers in  
wares pertaining to those lines ONLY. Please to  
remember it.2<sup>nd</sup> Advertisements for September 1 issue must  
REACH US by noon, Aug. 25. Address,

THE AMERICAN FLORIST CO., Chicago.

## Catalogues Received.

Jacob C. Cassell, Philadelphia, terra  
cotta vases, etc.; O. R. Kreiburg, Phila-  
delphia, seeds; Wm. H. Smith, Phila-  
delphia, strawberry plants; Drumm &  
Baker Co., Fort Worth, Texas, bulbs;  
Abel Burt, Syracuse, N. Y., greenhouse  
boiler.

SPOKANE FALLS, WASH. TER.—Miss  
Rose Wright has purchased the florist's  
business of Mrs. M. E. Gould and intends  
enlarging.

GRAND FORKS, DAKOTA.—Mrs. W. L.  
Dudley, whose greenhouse (as well as  
home) was completely wrecked by the  
tornado which visited this place some  
weeks ago, has rented the Kueelaud  
greenhouse and consolidated the stock  
with her own, removing the house to a  
down town location.

L'ILLUSTRATION HORTICOLE.—Twent-  
cent numbers contain fine colored plates  
of Rhaps Kwamwonzick, Nepenthe  
Heuryana, Anthurium Scherzerianum  
var. Parisiense and A. S. var. Bruxel-  
liense. This elaborate publication is un-  
der the direction of J. Linden at Brus-  
sels, Belgium.

HORTICULTURAL ENCYCLOPEDIA.—J.  
A. Penman sends us "The Illustrated  
Dictionary of Gardening and Encyclope-  
dia of Horticulture." It has met with a  
large sale both in England and the  
United States, and should be in the  
hands of every florist and seedsman.  
The work is complete in seven volumes,  
at \$3 each. Mr. Penman will be present  
at the Chicago convention to take orders  
for the work.

GRUBS.—In reply to "A Sufferer":  
We were bothered with grub worms in  
our lawn last year, and tried two reme-  
dies, as follows: With a heavy wooden  
bar we tamped the ground thoroughly,  
and about half of the grubs were killed.  
By putting on a 2 per cent. coal oil  
emulsion, all the grubs were killed that  
were reached. The emulsion must be  
thoroughly made, or it will kill the  
grass as well as grubs. It can be made  
and applied for half a cent per gallon.  
For the lawn the ground should be wet  
down at least two inches, and that will  
take about one gallon of the emulsion to  
the square foot. By this time the grubs  
have done nearly all the damage they  
will for this year. They will come out  
as beetles next spring, eat the leaves off  
your trees for awhile, lay their eggs and  
die. In three years, unless something  
happens to them in the meantime, you  
will have another crop of grubs in the  
lawn. If "Sufferer" will write me I will  
send full directions for making the emulsion.  
Champaign, Ill.

G. W. McCLUER.

## Wholesale Markets.

## Cut Flowers.

BOSTON, Aug. 9.	
Roses, Teas.....	3.00
" Fancy.....	3.00
" Hybrids and Am. Beauties.....	3.00
Asters.....	1.50
Lily of the valley.....	6.00
Adiantums.....	1.50
Smilax.....	12.50
Pink pond lilies.....	10.00
Sweet Peas.....	25
Carnations are practically out of the market, but asters do duty in their stead for funeral work. First-class roses in brisk demand, but hard to find.	

NEW YORK, Aug. 9.	
Roses, Perles, Niphetos.....	\$3.00
" Bennetts, Souvrs.....	3.00
" Papa Gontier.....	2.25
" Mermets.....	4.00
" An. Beauty.....	3.00
" La France.....	6.00
" Bon Silence.....	1.00
Carnations.....	1.50
Lily of the valley.....	6.00
Mignonette.....	2.00
Smilax.....	15.00

CHICAGO, Aug. 10.	
Roses, Perles, Niphetos.....	3.00
" Mermets, Bennetts.....	4.00
" Bons, Salzano.....	1.50
" Am. Beauty.....	18.00
Carnations.....	1.00
Smilax.....	18.00
Sweet Peas.....	50

PHILADELPHIA, Aug. 9.	
Roses, Perles, Niphetos, Mermets.....	\$3.00
" La France, Bennetts.....	4.00
" Teas.....	1.00
" Cooks.....	2.00
Gladious.....	50
Tuberose, Double.....	3.00
" single.....	3.00
Smilax.....	20.00
Lilium rubrum.....	5.00
Callas.....	15.00
Business better than at last report.	

**SPECIALTES**

FOR JULY AND AUGUST.

**PINK POND LILIES.**

LILY OF THE VALLEY,  
FANCY ROSES,  
SWEET PEAS,  
ADIANTUMS.

**WM. J. STEWART,**

67 Bromfield Street, Boston, Mass.

**W. S. ALLEN,**

Wholesale Dealer in

**CUT FLOWERS,**

Has moved from 940 Broadway to 36 East 23d St.

**W. S. ALLEN,**

36 EAST 23rd STREET, NEW YORK.

**JOHN KEYES,****WHOLESALE - FLORIST**

No. 11 West 27th Street.

Near Broadway, NEW YORK.

Consignee of the principal growers about New York.  
Lilies of the Valley and Lilies at all times.**JOHN J. PERKINS,**

Wholesale and Commission

**»FLORIST«**

59 West 28th Street.

(Telephone No. 672, 39th St.) New York

Branch, 38 S. 16th St., Phila., Pa.

Greenhouses, Creskill, N. J.

**W. F. SHERIDAN,****WHOLESALE FLORIST**

721 SIXTH AVENUE, N. Y.

Mention American Florist.

Thos. Young, Jr., &amp; Co.,

**Wholesale Florists,**

INCORPORATED 1885,

23 West 23d St., NEW YORK.

**GEORGE MULLEN**✠—WHOLESALE FLORIST—✠  
17 CHAPMAN PLACE, (Near Parker House)

BOSTON, MASS.

Orders by Mail, Telephone, Telegraph or Express  
promptly attended to. Night dispatch should  
be sent at full rate to insure delivery for  
early morning trains. Store open from 7 a. m.  
to 8 p. m. Return Telegram if order cannot be filled,  
or if desired in any case. Mention Am. Florist.

**J. C. VAUGHAN,****WHOLESALE CUT FLOWERS**Direct all cut flower orders to cut flower  
department

VAUGHAN'S SEED STORE, 42 La Salle St., CHICAGO.

**WELCH BROS.,**  
**WHOLESALE FLORISTS.**

155 Tremont Street, BOSTON, MASS.

We make a specialty of shipping choice Roses and  
other flowers, carefully packed, to all points in  
Western and Middle States.  
Return Telegram is sent immediately when it  
is impossible to fill your order.

**HAMMOND & HUNTER,**

Wholesale dealers in

Cut Flowers and Florists' Supplies

61 West 30th Street, NEW YORK.

LaRoche & Stahl,  
Florists & Commission Merchants

—OF—

**CUT FLOWERS,**

1237 Chestnut Street, PHILADELPHIA.

Consignments Solicited. Special attention paid to  
shipping. Mention AMERICAN FLORIST.**C. STRAUSS & Co.**

Telephone 977-3. WASHINGTON, D. C.

Grower of and Wholesale Dealers in

**ROSES and OTHER CUT FLOWERS**

1000 Portlan Planted for coming Winter.

**CUT FLOWERS**

The choicest Cut Flowers at lowest market rates  
shipped C. O. D. Telephone connection. Use A. F.  
Code when ordering by telegraph. For prices, etc.,  
Address,

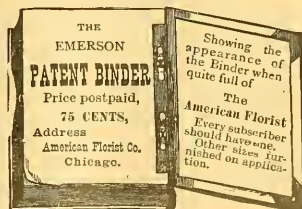
J. L. DILLON, BLOOMSBURG, PA.

ROSS & MILLANG,  
Wholesale: Florists,

NO. 1168 BROADWAY.

(Formerly at 225 5th ave.)

Bet. 27th &amp; 28th s's., NEW YORK.





D. M. FERRY &amp; CO.'S NEW SEED WAREHOUSE

#### D. M. Ferry & Co's New Warehouse.

D. M. Ferry & Co's mammoth seed warehouse just erected by them at Detroit occupies the site of their warehouse which was destroyed by fire January 1st, 1886; one half a city square, extending 300 feet on Brush St., and 120 feet each on La Fayette and Croghan Sts.

Built after the the mill construction or slow burning plan throughout, while it seems a single building it really is five distinct buildings in one, with heavy brick division walls and heavy exterior walls of brick and stone. Above the basement the floors, which are supported by heavy beams resting upon massive oak pillars, are made of solid joists 2 x 8 inches laid side by side, upon which the wearing floors of hard maple are laid. Floors of this construction are capable of carrying about any weight which can be placed upon them, a prime necessity when the great weight of most of their stock is considered.

As will be seen from the cut the warehouse is six stories high with a deep and light basement under the whole, an aggregate of very nearly six acres of floor space. Easy access to all parts of the warehouse is afforded by three powerful hydraulic elevators each running from the basement to the top floor in its own solid brick shaft with openings on the several floors protected by corrugated iron doors.

No pains nor expense have been spared to provide complete security to life and

property. In addition to the principal staircase leading from the main entrance on Brush St., shown in the cut, there are two other staircases for use in case of fire or other emergency. All three communicate through corrugated iron doors with all the floors and are all enclosed by substantial brick walls rendering egress from the upper floors easy and safe under any circumstances. Besides the method of construction employed in the building and the heavy fire walls running high above the roof, the whole structure is equipped with automatic sprinklers, one or more of which being set going by the heat generated by an incipient fire will surely hold the fire in check till help can arrive or will completely extinguish it.

THE Omaha *Bee* reports that the Emerson Seed Co. have become interested in a new canning factory started in Omaha.

CAMBRIDGE, N. Y.—Jerome B. Rice & Co. are building an addition to their large seed warehouse, which will double its capacity, to be used mainly as a store-room. It is a few feet removed from other buildings, to decrease fire risk.

WE HAVE as yet been unable to verify the rumor that certain Philadelphia seedsmen have leased an Ohio natural gas well for night work on their 1888 catalogues though the probable truth of the report is readily conceded by those best informed.

#### Chicago.

Alexander Newett, of Lawndale, is building three new houses, 100 x 20 each.

A. T. Jackson is building two additional new houses, 20 x 210 and 10 x 210 respectively, at Bowmanville.

J. T. Anthony has been east, selecting a stock of decorative plants for his new show house.

F. F. Smith, Normal Park, is building a new rose house 100 x 20.

R. J. Donovan, of Rose Hill, is quite ill. "Dick" is a universal favorite with his business acquaintances, and all hope to see him out again at an early date.

Fire destroyed the residence of Albert Fuchs, a Division street florist, the night of Aug. 9. Very little insurance.

CRUDE OIL FOR FUEL.—Has any reader of the *FLORIST* tried crude oil for greenhouse heating? If so will he please state result, expense, etc. J. A. B.

CLEANING BRICKS.—What will prevent green slime from growing on brick floors in greenhouses? Can I clean them in any other manner than scrubbing. J. A. B.

DETROIT.—Stephen Taplin and G. S. Taepke are both building new rose houses to meet the increased demand for cut flowers. Wm. Ferguson has sold out to the Detroit Floral Co. He has been appointed Superintendent of Belle Isle park, a 700 acre park situated on an island in the Detroit river.



## GROWTAGE'S PATENT BUILDING FOR HORTICULTURE



— GLAZED WITHOUT PUTTY. —

Endorsed by the New York Horticultural Society.  
Illustrated Circular mailed on application.  
Plans and estimates given for every description of  
Horticultural Buildings.

**H. J. GROWTAGE,**  
76 Myrtle Avenue, BROOKLYN, N. Y.

ONLY POTTERY MAKING A SPECIALTY OF

## FLOWER POTS

FOR FLORISTS.

THE WHILLDIN POTTERY CO.,

713 & 715 WHARTON ST.,

PHILADELPHIA.

## SYRACUSE POTTERY

PACKS POTS in CRATES at PRICES

As follows, f. o. b. buyer's risk, cash with order,  
price per crate of 3,150 Thumbs ( $1\frac{1}{4} \times 2\frac{1}{2}$  in.)....\$8.25;  
2,625 2 $\frac{1}{2}$ -inch, \$8.25; 1,575 2 $\frac{3}{4}$ -inch, \$7.50;  
1,150 3-inch, \$8.75; 800 4-inch, \$4.75;  
820 5-inch, \$4.40; 556 6-inch, \$3.35;  
144 7-in. hand-turned, \$5.60; 60 8-in. hand-turned, \$4.10.  
ASSORTED CRATE No. 3, \$4.10, contains 30 7-inch,  
20 8-inch, and 16 9-inch, all hand-made.  
ASSORTED CRATE No. 4, \$5.00, contains 180 4-inch,  
125 5-inch, and 80 6-inch. Ask prices of 20 sizes.

J. N. PERKINS, Manager, Syracuse, N. Y.



Second Edition.

## GEO. A. SOLLY & SON'S BOOK OF PLANS

For

Carpet and Ornamental Flower Beds.  
With many it is a difficult task to lay out a carpet  
bed, or fancy design on the lawn, and perhaps more  
difficult to choose the proper plants to harmonize, so  
as to give the best effects. The object of these  
drawings is to assist gardeners and amateurs, and to  
enable them to choose the proper plants for their  
work. It is expected that this book will supply a  
long felt want, as it is the first and only publication  
entirely devoted to Fancy Flower Bed Designs.

This, our SECOND EDITION, consists of over 100  
designs, finely engraved, on good paper, nicely  
bound, sent pre-paid to any address on receipt of  
Price, \$3. GEO. A. SOLLY & SON,  
SPRINGFIELD, MASS.

Mention American Florist.

## GREENHOUSE SYRINGES.

Three New Patterns. Low Prices. Good  
workmanship. Twenty-one other varieties.

Length of Barrel, 18 in.; Diameter, 1 $\frac{1}{2}$  in.



No. 10.

No. 10—Conical Valve Syringe, full size, two  
Spray Roses and Jet. Side attachments.

No. 11—Open Rose Syringe, full size, two Spray  
Roses and Jet. Side attachments.

No. 12—Open Rose Syringe, two Spray Roses and  
Jet. Side attachments.

These syringes are made with special reference to  
those who desire a low-priced working syringe.  
Every syringe we make has our name and address  
on the Barrel. Manufactured by

ROBT. T. DEARIN & CO.,

12th & Buttonwood Sts., Philadelphia, Pa.

## HALES' MOLE TRAP

For destroying ground moles in lawns, parks,  
gardens and cemeteries. The only PERFECT  
mole trap in existence. Guaranteed to catch  
moles where all other traps fail. Sold by  
seedsmen, Agricultural Implement and Hardware  
dealers, or sent by express on receipt of \$2.00, by  
H. W. HALES, RIDGEWOOD, N. J.

It is a conceded fact that there is no better place in the U. S.  
for Nurserymen to sort up, Dealers to Pack, or Planters to  
order, than at the Painesville Nurseries, the aim of



THE STORRS HARRISON CO. being to carry  
a full line of Fruit and Ornamental Trees, Bulbs,  
Shrubs and Roses. Have a remarkably fine stock  
of Standard and Dwarf Pears, Kilmarnock Wil-  
lows and other Weeping Trees; also Grape Vines,  
including all the Best New Sorts—Moore's Diamond,  
Empire State, Niagara, Jessica, Frances B. Hayes, etc.  
Can supply car loads of elegant, large Nursery-grown  
Elms, Catalpas, Maples, Poplars, Tulips, etc. The



handsomest lot of Pyramidal Arborvitae and Irish Juniper ever offered, and acres on  
acres of other Evergreens. Prices reduced to suit the times. Come and see. Corres-  
pondence solicited. Catalogue Free. 33d Year. 700 Acres. 24 Greenhouses.  
Address THE STORRS & HARRISON CO., PAINESVILLE, LAKE CO. OHIO.

WRITE FOR LOW QUOTATIONS OF THE FOLLOWING

## FRUIT TREE STOCKS

— TO —

## LENAULT-HUET,

USSY, — Calvados, — FRANCE.

COMMON CHERRY, MAHALEB, ANGERS

QUINCE, COMMON APPLE,

MYROBOLAN, COMMON PEAR.

These different stocks being grown here this year in very  
large quantities, I am able to compete in prices with any other  
French nurserymen. My catalogue being published in your  
country in September only, I beg to call your special attention  
to this advertisement and to let you know that I am ready now  
to agree with you by correspondence about

Prices, Sizes, Age of all different kinds,  
and for any quantity.

THE AMERICAN FLORIST COMPANY'S

## :: DIRECTORY ::

OF

FLORISTS, NURSERYMEN AND SEEDSMEN

OF THE

UNITED STATES AND CANADA.

1887.

PRICE ONE DOLLAR.

The most complete and accurate list yet published. The key designates the particular branch of the  
trade each one is engaged in. The street and number of those living in cities will insure the  
delivery of tons of catalogues which have hitherto remained dead in the office to which  
they were addressed. At this low price every one in the trade can afford  
to have a copy for reference. Address

AMERICAN FLORIST CO.

54 LA SALLE ST., CHICAGO.

## Missionary Work by the Amateur.

A few years ago I was living in a town of about 16,000 inhabitants. There were two small commercial florists when I first went there, and of course I made their acquaintance, first by purchasing what I needed for my garden, and afterwards through the free-masonry of plant love. Whenever I had anything new or especially good my florist friends would call on me, and a stroll around my garden usually terminated in their bearing with them cuttings or plants. Mine was the only place where any attempt at flower culture was made in an area of nearly five blocks. Some of my neighbors had a few peach or apple trees, a little "garden truck," and a large quantity of poor grass and luxuriant weeds.

I have always been a believer in the civilizing influence of flowers, and invariably endeavor to enlist women and children in the work of garden making—that is, flower-garden. To this end I always sow all my seeds in seed-beds, and transplant to where I wish them to bloom. By this means there is an abundance of seedlings which I am able to devote to missionary purposes.

One May evening, during the visit of one of my florist friends, who had dropped in to see some pretty good pansies I had, one of my pensioners, a little girl, came timidly into my garden, bearing a basket I had promised to fill for her, and excusing myself for a few moments to my friend, I went to my seed-beds, filled the basket, and gave necessary directions and information as to size the plants would attain, etc., to my little visitor, and then escorted her to the front gate. Here I was joined by the florist. "Don't you know you are doing all you can to ruin my business?" said he, with evident irritation and annoyance in his tone. "Did you ever sell any plants to any of my neighbors for a block in any direction?" I ask him by way of reply. He admitted he had not. "No," said I, "for there were none grown in this neighborhood until I moved here. Now there are half-a-dozen gardens being made; next year there will be fifty. Nothing is more catching than gardening; and, mark my word, I am making customers for you."

A year passed—in fact some fourteen months after the above conversation,—I was standing on the sidewalk in front of my home, having just given a bouquet to a young lady friend, when my old florist acquaintance came along. "You are at it again!" said he, good-humoredly. "But I don't propose to scold you. I guess you were right about what you said. Go on with your missionary work, old fellow." "Well, some of my neighbors have been to see you, have they?" asked I. "How much did you sell around here?" "I am not quite certain," replied he, "but I guess close on to two hundred dollars."

Now there are five florists in that town.

R. A. MEERS.

## GREENHOUSE HEATING.

BY A. B. FOWLER.

Explains fully all the best systems of heating greenhouses by both hot water and low-pressure steam. Tells you the points to consider in selecting an apparatus. How to adjust same to various locations; gives the results of the latest scientific experiments. Shows how to compute the number of feet of pipe required for a given space; draft and other important matters.

Is highly commended by Mr. John Thorpe and others. Portland, Me.  
Sent on receipt of price. Address,  
**AMERICAN FLORIST,**  
CHICAGO.

## E. H. KRELAGE &amp; SON.,

HAARLEM, HOLLAND.

**DUTCH BULBS.**

Newest Wholesale Trade List (No. 334) now ready. Sent to the trade prepaid on application.

PRICES MUCH REDUCED AND VERY CHEAP.

Enormous Stock of first quality and complete collection of Bulbs, etc., of every description.

NO AGENTS.

☞ Please address direct.

**FALL BULBS.**

HYACINTHS, named and in colors.

TULIPS, double and single.

HYACINTHS, Romans.

NARCISSUS, double and single.

Lilium Harrisii, Lilium Candidum, Lilium Auratum, Lily of the Valley pips and shoots, Freesia Refracta Alba.

And other fall planting bulbs. Catalogue free.

A. GIDDINGS, DANVILLE, ILL.

## BEERMORST &amp; CO.,

SASSENHEIM, (near Haarlem) HOLLAND

GROWERS OF

HYACINTHS, TULIPS, CROCUS, NARCISSUS, AND ALL OTHER DUTCH BULBS.

Catalogue FREE on application.

**DUTCH BULBS.**

## BAKKER BROTHERS,

BENNEBROEK (near Haarlem), HOLLAND,

GROWERS OF

HYACINTHS, TULIPS, CROCUS,

Narcissus, Spireas, etc,

WHOLESALE ONLY.

NO AGENTS.

## HERMAN BUDDENBORG,

WHOLESALE GROWER OF ALL KINDS OF

**DUTCH BULBS AND ROOTS.**

Inform the trade that his wholesale catalogue has been mailed, intending purchasers who have not received it, should write for one before ordering elsewhere.

Special quotations for large quantities will be given on application, while prime quality at the very lowest prices is guaranteed.

HILLEGOM, near Haarlem,

- HOLLAND.

**J. C. VAUGHAN'S FALL CATALOGUE**  
**IS READY.**

Bulbs Now in Stock:

FREESIA, L. MARRISII, ROMAN HYACINTHS.

42 LA SALLE ST., CHICAGO.

**My WHOLESALE AND DESCRIPTIVE Catalogues**

for 1887, of Bedding Plants, Roses, Palms, Orchids, etc., mailed to all applicants. Large stock of the following on hand at cheap rates: *Ampelopsis Veitchii*, various sizes *Tea*, and *Hybrid Roses*, all the leading sorts, named *Chrysanthemums*, *Dracaa Indivisa*, various sizes, *Echeverias*, *Small Ferns*, *Geraniums*, double and single, best named sorts, *Areca Lutescens*, in 2½, 4, 5, and 6-inch pots, *Lalania Borbonica*, *Scaforthia Elegans*, *Oreodoxa Regia*, *Corypha Australis*. Other Palms, such as *Cocos Weddelliana*, *Chameroops Excelsa*, *Phoenix Reclinata*, *Phoenix Rupicola*, *Phoenix Tennis*, *Kentias* of sorts. *Glaziovra Insignis*, fancy named *Clematis*, and other vines, etc. Prices given on application.

## WM. C. WILSON, FLORIST,

Steinway's, Astoria L. I.

**SMILAX.**

10,000 Strings of Smilax for the trade. Steady customers solicited.

F. E. FASSETT & BROS.,  
Ashtabula, Ohio.

**1,500 SMILAX PLANTS**

In good, strong, healthy condition at \$6.00 and \$7.00 per hundred.

F. H. PIRA, LA GRANGE, ILL.

**SMILAX.**

Several thousand strong Smilax at the following prices:

3-inch pots, ..... per 100 \$4.00

2½-inch pots, ..... 3.00

Address, RIENEMAN & PETERSON,  
Harrisburg, Pa.

**Bulbs! Bulbous Roots!**

HULSEBOSCH BROS.,

Overveen, near Haarlem, Holland

The only growers of those fine there resides a member in the States.

Price list free on application. Address

P. O. Box 3118, New York City.

Hyacinths, fine mixed, per 100, \$3.00.

Tulips, fine mixed, per 100, \$1.00.

**BULBS! BULBS! BULBS!**

Before placing your order for HOLLAND BULBS write me for my trade list. I have made special arrangements with some of the largest growers in Holland, and can offer you TERMS and PRICES better than any other firm does. All orders over ten dollars will receive a CREDIT until May 1, 1888. Write for terms and prices.

E. HIPPARD, Youngstown, Ohio.



**BULBS! IMMORTELLES!****J. A. DEVEER,**

(Formerly of DeVeer &amp; Boomkamp)

Removed to 19 Broadway, NEW YORK.

SOLE AGENT FOR

THE GENERAL BULB CO., Vogelenzang, Holland.  
LS. BREMOND FILS, Ollioules, France.

PRICES ON

**DUTCH BULBS,**Roman Hyacinths, Paper White and Roman  
Narcissus, Lilium Candidum, Freesias, L. Har-  
risii, Longiflorum, etc., for Fall delivery.**NOW READY.****SPIRÆA JAPONICA.**

Per 100

FINE CLUMPS..... \$ 6.00  
LARGE " ..... 10.00**E. SHEPPARD & SONS,**

224 Fairmount Street, LOWELL, MASS.

**Freesia Refracta Alba.****LARGE BULBS.****ROMAN AND ITALIAN****HYACINTHS.****NARCISSUS,****DAFFODILS,****HARRISI,****LILY OF THE VALLEY PIPS, &c.**

For the Fall Trade. Prices on application.

**MICHEL PLANT AND SEED CO.,**

718 Olive St., St. Louis, Mo.

**Dutch Bulbs.****R. van der Schoot & Son.**

HILLEGOM (Near Haarlem)

HOLLAND.

ESTABLISHED 1830.

GROWERS OF

Hyacinths, Tulips, Crocus

Narcissus, Lilies, Etc.

Intending purchasers, before or-  
dering Bulbs, write us for a  
Catalogue.

Mention Am. Florist.

**AUGUST RÖLKER & SONS,**

NEW YORK.

—Supply the Trade.—

**DUTCH BULBS!**

Catalogues on application.

**C. H. JOOSTEN,****IMPORTER,**

3 Coenties Slip, NEW YORK.

Mention American Florist.

**MRS. J. S. R. THOMSON,**Wholesale Grower of Excelior, Pearl and var.  
Tuberosa, Eulalia var. and zeb. Arundo donax  
var., and collector of Zephranthes Atamasco.

Spartanburg, S. C.

We have

**FINE STOCKS**

OF THE FOLLOWING:

**CHRYSANTHEMUMS** In Great Variety.**GERANIUMS** Double and Single, very best kinds.**HELIOTROPES** 6 Fine Kinds.**FUCHSIAS** 10 Best Old Kinds.**FUCHSIAS** 8 Best New Kinds.**Begonia Metallica. Abutilon Thompsonii Plena.**Write us if you want any of the above, as all the plants are strong, in fine condi-  
tion and sure to please.**V. H. Hallock, Son & Thorpe,****EAST HINSDALE, NEW YORK.****READY AUG. 15 to 20,**

A large stock of selected

ROMAN HYACINTHS, LILIUM HARRISII,  
FREESIA REF. ALBA, and a fine line of 15  
varieties forcing Narcissus, dbl. and sgle.**READY SEPT. 1 to 5,**Lilium Candidum, large bulbs; also a full assortment of  
Dutch Hyacinths, Tulips, Crocus, &c., from the best Holland  
growers. Select florists seeds, Pansy, Primula, Cineraria, &c.  
Send for Price List, now ready.**JAMES KING,**

170 LAKE ST., CHICAGO.

**F. E. McALLISTER,**

—WHOLESALE DEALER IN—

**Seeds**For the Florist  
Market, Garden-  
er and Farmer.**Requisites**Such as Baskets, Im-  
mortelles, Grasses,  
Mosses, Boquet Pa-  
pers, Pampas  
Plumes, etc**Bulbs**For the Green-  
house or Gar-  
den.

22 Dey Street, - - - NEW YORK.

**SEGERS BROTHERS,**

Growers of

**HOLLAND BULBS**

Such as

**Hyacinths, Tulips, Crocuses, Narcissus, Liliums, Lily of  
the Valley, Anemones, Ranunculus, Spiraea, Etc., Etc.**References about quality etc., to several United States Florists  
and Seedsmen.*Sent for Wholesale Catalogue.***LISSE, NEAR HAARLEM, HOLLAND.****WHOLESALE ONLY.****NO AGENTS.****SEGERS & CO.,****BULB GROWERS,****LISSE, NEAR HAARLEM, HOLLAND, EUROPE,**

Are offering in their Catalogue for the coming season,

**White Hyacinths at \$26.00 per 1000; White Tulips at \$6.50 per 1000,  
and Scarlet van Thol Tulips at \$4.00 per 1000.**Wholesale Catalogue containing all Holland grown Bulbs and Bulbous Roots, will be mailed by  
them free on application.

### Water Over Glass as a Roof to Plant-Houses.

Some frames on this new principal having, by permission of the authorities, been exhibited at the Royal Botanic Gardens in the Regent's Park, with the plants grown in them during the late winter without artificial heat, a short description of this mode of cultivating half-hardy plants may possibly be interesting to some of your readers.

The essence of the invention is, that all light and heat admitted to plants shall previously pass through a shallow layer of water. The properties of water are found to exercise great control over temperature, protecting plants entirely from frost in the winter, and from excessive direct heat in summer—results which have a considerable influence on the economy of plant culture.

The application of the water-service involves no difficulty. In the case of a garden frame a sliding tank or cistern, about 3 inches deep, is made to fit over the sill of a frame, either of wood or bricks, containing the plants. This tank is called a "water-light," and answers to the light of an ordinary garden frame, the only difference being that it holds water, and is always placed in a flat position. On a larger scale, a succession of these water-lights between rafters form the roof of greenhouses, &c. The depth of water generally kept in the tank is about 2 inches in winter and summer, and half the depth in spring and autumn. The water is not usually encased in glass, but remains in the cistern open to the weather.

In winter the tank is constantly frozen over, but as long as a layer of liquid water remains under the ice the plants cannot be injured by frost. The reason for this is, that liquid water always remains at 32° Fahr., or just above freezing-point, and the plants below can no more be frozen than fish or other creatures under a great depth of ice. The plants have the further protection of the glass surface below the water, so that it may be taken as a rule that they will be exposed to no lower a temperature than 35° Fahr. At that temperature a vast range of plants can be wintered without the assistance of artificial heat, and as far as present experience warrants in structures either higher or more complicated than garden frames.

Water has, moreover, the singular property of absorbing and retaining the heat-rays of the sun instead of transmitting them, as in the case of glass, directly to the plant. The consequence is that in summer, plants, however delicate, may be exposed to full sunshine without being injured by scorching heat, and shading therefore becomes unnecessary. For the same reason ventilation and watering are less urgently required, and the height of the structure may be greatly reduced.

Experience has shown that the moist and regular temperature inside the water frame is particularly adapted to striking cuttings and raising seeds, difficult kinds of which have been successfully brought on under water cover. With the addition of air, established plants will grow well throughout the year, being placed in good conditions for health under a flat roof and close to the light.

It would appear that plant-houses on the water principle will be found very useful in London and other large towns and suburbs, where there are many small cultivators who wish to keep a few plants from year to year, but have not the ad-

vantage of a gardener or heated greenhouse. These will be enabled to extend the field of their gardening pursuits, while to larger growers the possibility of saving in fuel, labor or structure, is worth consideration.

I will conclude with the hope that this invention, which was satisfactorily tested at Kew and other Royal gardens through the late severe winter, will be of use in extending the culture of greenhouse plants.

Thomas C. Marsh.

[A frame on this principle, filled with soft-wooded greenhouse plants, may be seen at Chiswick. The plants were in the frame all the winter, and suffered no injury.—Ed.]—Gardeners' Chronicle.



### TRY DREER'S GARDEN SEEDS

Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free.

HENRY A. DREER, Philadelphia

### 50,000 CUT FERNS.



PANCY.



DAUGER.

From 10 to 15 inches long, of a beautiful dark green, used for Bouquet work, filling flower baskets, &c., &c. \$1.50 per 1000 Ferns.

### SPHAGNUM

or Packing Moss constantly on hand; long clean fiber. Dry or Green.

\$1.00 per bbl. or six bbls. for \$5.00. Bouquet Green, \$2.00 per bbl.

One Million WHITE DAISIES and BUTTERCUPS carefully packed in damp moss, \$1.00 per thousand either kind.

L. B. BRAGUE,

HINSDALE, MASS.

### 10,000 ELECTROS.



Send for List of Catalogues.

### FALL : CATALOGUES

Printed in a superior manner, with plentiful use of fine cuts of BULBS and other seasonable stock, by

### THE FLORIST PRINTER.

Who has long experience and the best facilities. CORRECT AND ELEGANT WORK GUARANTEED.

Send for estimates for anything you need, to

### J. HORACE MCFARLAND.

Printer for Nurserymen, Florists, and Seedsmen, HARRISBURG, PA.

"NEW YORK, May 17, 1877. \* \* I am forced to admit that you thoroughly understand the art of Catalogue Printing." C. H. JOUSTEN.

Mention American Florist.

### Philadelphia Immortelle Design Co.

MANUFACTURERS.

OFFICE

S. E. COR. 8th & Arch Sts.,

PHILADELPHIA, PA.

### Challenge Ventilator.



Without a rival either in Cost, Speed in operating or Security in case of storms.

No Liability to Break or get out of order.

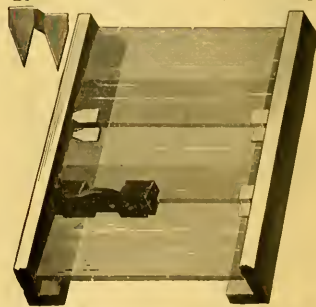
Simple in construction, perfect in operation.

Write for prices and circulars to

QUAKER CITY MACHINE WORKS,  
RICHMOND, IND.

H. W. EAMES & CO.'S  
PATENT TWIN

### GLAZIER POINTS



### A USEFUL INVENTION

The twin point at the upper left hand corner of cut represents the full size of points, while the tool that is used for pushing the points into the window frame is shown on the cut.

No more Leaky Skylights! No more Slipping and Breaking of Glass in Greenhouses or Farmers' Sash.

These points the manufacturers claim are far superior to the old mode of setting glass, as they will hold each pane in place, thus not allowing the glass to slip, causing binding and consequent cracking. Each box contains 400 rights and 400 lefts. The manufacturers also make a tool for driving the points. These points are the cheapest and best, and most durable in the market, as testified to by many florists in every state in the union. Sold by most all prominent seedsmen in the country. If you don't find them at your supply stores, send direct to the manufacturer as we have made arrangements with the Adams Express Co. for low rate of express charges to promote traffic, so you need not fear charges will be too high. A Liberal Discount to the Trade.

Price 35 cents a box. Tools 15 cents each.

Address all orders and communications to the manufacturers.

H. W. EAMES & CO.,

Milford, Mass.

Preserve this advertisement for future reference and send for samples before you do your building and repairs.

Mention American Florist.



J. C. VAUGHAN, Chicago,  
Agt. west of Pennsylvania.

 Full descriptive catalogue may be had upon application.

## Plant Notes from the London Garden.

**JAPANESE LILAC** (*Syringa japonica*).—Some cut blooms of this new hardy shrub exhibited by Messrs. Veitch at South Kensington on Tuesday showed admirably what a valuable introduction it is. There is a family likeness among all the other species of *Syringa*, but this one is so different from the rest and so much resembles some of the privets (*Ligustrum*) that it was and still is known as *Ligustrum amurense*. Since, however, the nature of its fruit has become known to botanists, it is found to be a true species of *Syringa*. In foliage it strongly resembles that of the Himalayan lilac (*S. Emodi*), being quite as large and of similar color. The myriads of tiny creamy white flowers are borne in panicle clusters at the tips of the shoots. At first they are quite white, but afterwards turn creamy. The perfume of the flowers is similar to that of the privet, but less powerful. It is apparently quite hardy, and if it can be grown in any position or soil as other lilacs, its value is increased. —H. G.

**IVY-LEAVED PELARGONIUMS**.—The vast improvement effected in the double-flowered forms of these pelargoniums within the last few years, and the different uses to which they may be put, have been so frequently dwelt upon by various writers that nothing more on that point is necessary, yet there are now so many varieties, some of which differ so slightly, if at all, from each other, that a few notes regarding the best of them may be of service. Having grown a great number, I have selected the following as the most desirable: Alice Crousse, deep magenta-purple, a vigorous grower and very floriferous—indeed, one of the best of all; Emile Lemoine, bright cerise-scarlet; Jeanne d'Arc, pale mauve—form of the flower and habit of the plant very good; Isidore Feral, soft satiny rose, a variety of more trailing habit than most of the newer kinds; Madame Crousse, salmon-pink, a good and generally cultivated variety; Louis Thibaut, bright red; Madame Thibaut, a short-jointed, sturdy variety of a bright rose color; the outside petals of this are distinctly reflexed, which gives to the whole flower a very uncommon appearance. Furstii Josephine Von Hohenzollern—though this variety has a cumbersome name, it is very beautiful, the flowers being bright red, shaded magenta, and very double. The other selected varieties are Madame Pages, deep lilac, feathered with a darker tint; Madame Jules Menoreau, rich bright rose; Shepoo, bright carmine; Comtesse Horace de Choiseul, small but double flowers of a pleasing shade of soft rose; Madame E. Galle, almost white; Madame Thouvenin, bright carmine, a grand flower and in all respects a desirable variety. The above may be relied on as a good and distinct selection, while I have a number of new varieties under trial which may also be desirable.—H. P.

**FOR SALE.**

25,000 Azalea Indica,

15,000 Camellias.

Orders for fall delivery now booked. For descriptive catalogue address,

**C. H. JOOSTEN,**

Importer of Plants, Bulbs &amp; Seeds,

3 COENTIES SLIP, N. Y.

**INDESTRUCTIBLE BENCHES**

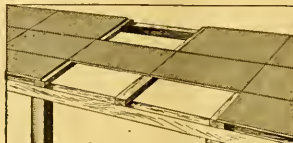
Can be made by using

**SLATES**

THEY ARE AS

**Cheap as Wood**

—AND—

**Every way Better**

They will last a lifetime and you will not be troubled with fungus from rotting wood. They transmit bottom heat better than wood.

Price, \$22.50 for 1,000 sq. feet of surface.

**SLATES 1-3 IN. THICK, 20, 22, 24 INCHES LONG.****AGENTS:**

NORTHERN NEW JERSEY, JOHN N. MAY, Summit N. J.  
 NEW YORK AND NEW ENGLAND, SIEBRECHT & WADLEY, 409 Fifth Ave., N. Y.  
 FROM PITTSBURGH WEST, HILL & CO., Richmond, Ind.  
 J. C. VAUGHAN, 42 La Salle St., Chicago.  
 CRAIG & BRO., 49th and Market Streets, Philadelphia, Pa.  
 CHAS. S. PRICE, Lansdowne, Pa.

THE

**American Florist Company's****◦ DIRECTORY ◦**

OF



(**FLORISTS,  
 NURSERYMEN,  
 AND SEEDSMEN,**

OF THE

**UNITED STATES AND CANADA.****1887.****PRICE ONE DOLLAR.**

The most complete and accurate list yet published. The key designates the particular branch of the trade each one is engaged in. The street and number of those living in cities will insure the delivery of tons of catalogues which have hitherto remained dead in the office to which they were addressed. At this low price every one in the trade can afford to have a copy for reference. Address

**AMERICAN FLORIST CO.,****54 LA SALLE ST., CHICAGO.**



## ORCHIDS.

The only Illustrated Catalogue in America  
*Devoted Exclusively to Orchids,*  
 Full of valuable and interesting information  
 ON  
 CULTURE, HABITAT,  
 TIME OF FLOWERING, &c  
 Of the coming florists' flower. Sent for 2 cent  
 stamp, by

**BRACKENRIDGE & CO.,**  
 GOVANSTOWN, BALTIMORE CO., MD.  
 Established 1854.

## ORCHIDS.

20,000.  
 In all the good flowering sorts, at moderate prices.  
 Cut blooms at all seasons.  
 Send for catalogue,

**WM. MATHEWS,**  
 Utica, N. Y.

## \* FERNS. \*

Fine Stock of best varieties for cutting from  
 for cut flower work. All the best new and old  
 varieties of

**ADIANTUMS AND PTERIS.**

\$8.00 A HUNDRED.

ALL IN FINE CONDITION.

**GEO. WITTBOLD,**  
 Wright's Grove, CHICAGO.

**H. H. BERGER & CO.**  
 ESTABLISHED 1878.



Importers of choice Japanese and Chinese fruit trees, rare ornamental shrubs, trees and plants. Specialty coming season, many new tree, flower and vegetable seeds. Wholesale bulb list now ready for the trade. Our new catalogue finely illustrated contains many valuable novelties. All our stock is carefully raised in our own nurseries—Agnio, Japan.

DEPOTS:  
 315 & 317 Washington St.,  
 SAN FRANCISCO,  
 and ALAMEDA, CAL.  
 Address P. O. box 1501,  
 San Francisco, CAL.

## Hardy American Plants.

LILIES, FERNS, BULBS,  
 ORCHIDS, SHRUBS.  
 Send for Trade List.  
**PRINGLE & HORSFORD,**  
 CHARLOTTE, VERMONT.

## PANSIES.

Orders booked now for plants to plant your cold  
 frames. My Pansies are **SUPERB**, being a selection  
 from the **Best Varieties** in the world.

Price, 50c. per doz.; \$7.50 per 1,000. Also J. Goodie  
 Coleus in September at reasonable rates.

**ALBERT M. HERR,**  
 Lock box 338, LANCASTER, PA.

## PANSIES

AND OTHER SEEDS FOR FALL SOWING  
 My collection of Pansies has for years attracted a  
 great deal of attention; florists and amateurs both  
 conceding them to be of the highest quality.

**OSCAR R. KREINBERG,**  
 P. O. Box 234, PHILADELPHIA, PA.  
 Write for Price List.

## ORCHIDS.

The largest stock in America of Orchids  
 for Cut Flowers.

## Special Offers.

**SIEBRECHT & WADLEY,**

409 Fifth Avenue,  
 Rose Hill Nurseries, NEW YORK.

## PALMS.

LARGEST AND BEST STOCK

— OF —

**PALMS for DECORATIVE PURPOSES**

In the world, not excepting Europe.

PRICES LOW.

**Siebrecht & Wadley,**

409 FIFTH AVENUE,  
 NEW YORK.

## CARNATION PLANTS.

Strong and Healthy, Ready Sept. 15th.  
 Edwardsii, Chester Pride, Fascination, Scarlet Gem,  
 Philadelphia Red, Snowdon, Duke of Orange, &c.  
 \$5.00 per hundred; \$50.00 per thousand.  
 Also, 300 Niagara Grape Vines, strong, one year  
 old, ready in Nov. or next spring. \$15 per hundred.  
**W. R. SHELMIER, Avondale, Chesler Co., Pa.**

## MIXED PANSY SEED.

CROP OF '87.  
 From selected plants of best color and large blooms,  
 Trimardeau, Imperial, Premier, and other  
 Fancy strains of my own growing, with special care  
 for florists.

¼ oz. \$1.00; ¼ oz. \$1.75; packet 25c.

**D. K. HERR,**  
 LANCASTER, PA.

## TO THE TRADE.

## NEW COLEUS.

I offer 12 New Coleus of the finest colorings and  
 markings, grown from seed of my own saving. They  
 are suitable for bedding, having stood the test of  
 our hot summer, and will in any variety extent. They  
 will unquestionably become popular from their

**BEAUTY, ORIGINALITY and HARDINESS.**  
 Growers would do well to procure one or more sets  
 this fall to propagate for spring sales.

PRICE, \$2.00 PER SET OF TWELVE.

Ready September 1, 1887.

**E. BAKER,**

FLORIST,  
 New Orleans, La.

## NARCISSUS AND DAFFODILLS

Thomas S. Ware has pleasure in drawing the attention of the American public  
 to his very extensive and most complete collections of these, which covers an exten-  
 sive acreage, for sale this season including all the popular Forcing and Decorative  
 varieties as well as the choice MODERN HYBRIDS.

**Clematis in best varieties.**

**Industry Gooseberry.**

Priced descriptive catalogue of these and many other choice

## PLANTS AND BULBS

Will be mailed free upon application to

**THOS. S. WARE,**

HALE FARM NURSERIES, TOTTENHAM, LONDON, ENGLAND.

## STORM KING.

THE FINEST FUCHSIA for RETAILING.

Price, thumb pots.....\$1.00 per doz.; \$6.00 per 100  
 3-inch and 3½-inch.....2.00 " 12.00 "  
**OXALIS VARIABILIS**, large white flowers, on  
 strong plants, often two inches across; 20 bulbs pre-  
 paid for \$1.00.

Our lock corner mailing boxes are the best, \$20  
 per 1,000. Sample 15 cents.

**ELLIS BROS., KEENE, N. H.**

## SPECIAL OFFERS

For Fruit and Ornamental Trees, Shrubs,  
 Small Fruits, Bulbs and other plants  
 solicited by

**FINK & CO., NURSERYMEN,**  
 Apartado 484, CITY OF MEXICO, MEXICO.

## SPHAGNUM MOSS,

Especially for Florist use, \$2 per bale. Pent \$1.25 per  
 bbl. Sheet or Log moss, \$2 per bbl., Pitcher plants,  
 a Wisconsin novelty, \$2 per doz.  
 Lycopodium in its season at lowest prices per  
 bbl. or ton.

**Z. K. JEWETT, Sparta, Wis.**

## ZIRNGIEBEL'S

IMPROVED : GIANT : TRIMARDEAU.

Seed of that magnificent strain of **PANSIES**  
 now ready.

1,000 seeds trade packages at \$1.00 each.

**DENYS ZIRNGIEBEL,**  
 NEEDHAM, MASS.

## FOR SALE.

Strong plants of Swanley White violets 75c. per two  
 doz.; \$3.00 per 100; \$25.00 per 1,000. Marie Louise, 30c.  
 per doz.; \$2.50 per 100; \$20.00 per 1,000. 800 dwarf,  
 bushy Bouvardias—A. Neuner and other mixed var-  
 ieties in 3-inch pots, \$1.00 per doz.; \$8.00 per 100.  
 Double White Hollyhock seed, new crop, 50c. per  
 doz.; Double Yellow, \$1.50 per doz. New crop bleached  
 Eranthus Ravenna pinnies, resembles pampas  
 plumes, first-class, \$4 per 100, second-class, \$3 per 100.  
**M. TRITSCHLER & SONS, Florists, Nashville, Tenn.**



## Grind your own Bone,

Meal, Oyster Shells,  
**GRAHAM FLOUR**, and Corn  
 in the \$5.00 HAND MILL (F.  
 Wilson's patent). 100 per cent  
 more made in keeping **POULTRY**.  
 Also **POWER MILLS** and **FARM FEED MILLS**.  
 Circulars and testimonials sent on application. **WILSON**  
**BROS., EASTON, Pa.** Mention the AMERICAN FLORIST.

Delegates to the next  
 convention will travel **Pullman Car Line**  
 via the



AND FROM  
 Louisville, Indianapolis, Cin-  
 cinnati and the winter re-  
 sorts of Florida and the  
 South. For full information  
 address

**E. O. McCormick, Gen. Passenger Ag't, Chicago.**



Wm. Radam's Patent Process for  
 Preserving Perishable Goods is the most  
 perfect process on earth. It kills the  
 fungus, or germs in the articles treated,  
 and fermentation is stopped. Any  
 quantity up to a car load can be treated  
 at one time. Patented September 23,  
 1886. Send for circulars to  
**Wm. Radam,**  
 Austin, Tex.

## Educating Flower Buyers.

A correspondent sends us the circular of a florist in his city with the request that it be published for the amusement of the readers of the FLORIST. We give but a portion of the price list, quoting only the choicer novelties:

EUREKA GREEN-HOUSES  
—AND—  
FLOWER-GARDENS.

Is the cheapest and best place this side of — to buy flowers and plants raised in our own soil. They will stand summer better than farm plants. To establish ourselves as the cheapest and best place, we will give the following Price List and Catalogue for Spring. We do ornamental garden and yard decorating, and we mold and make vases for the yard. The "Eureka" is the cheapest place to buy cut flowers, the best place to buy bouquets, and the best place to get funeral designs. For every dollar's worth of flowers we give one extra plant; also set the plants in your yard, and guarantee all plants bought from us.

Rose-growing a specialty. We sell the finest kinds of roses from 15 to 25 cents — raised in our greenhouses.

## PRICE — LIST.

Each.	Each.
Heliotrope, 10	Maiden Hair, half-fern, 25
Sweet Elysium, 5	Colodium, 10
Altissimulhera, 5	Trusia Alba, 10
Arbutand, 10	Agratium, 10
Orlanda, 10	Citiosia, 10
Bl'm'ng Parlor Ivy, 5	Canua, 15
Cislobolia, 5	Cantauria, 15
Hoyer, 15	Cyclosian, 75
Ashua, 10	Eufatonia, 10

WASHINGTON.—Mr. Jno. W. Langdale of Tacoma, is building three houses. One 130 x 20 is to be used for roses, and of two 100 x 18 each, one is for carnations and the other for smilax. He will grow for the wholesale trade only.

## Ives' Putty Machine.

Patented Jan. 8, 1887.

The best device ever invented for laying putty. With this you can make old leaky sash perfectly tight without removing the glass. It will do the work of five men in one being glass.

Sent by Express on receipt of price, \$2.50.

J. H. IVES, DANBURY, CONN.



ALL SIZES OF SINGLE AND DOUBLE THICK

GLASS FOR GREENHOUSES.

ALL GLAZIERS' SUPPLIES.

Write for Latest Prices.

M. M. BAYERSDORFER & CO.

56 N. 4th Street, Philadelphia, Pa.,

Manufacturers and Importers of

Baskets & Florists' Supplies

NEW CATALOGUE READY,  
and sent free on application.

**ENGRAVING DIRECT FROM PHOTOGRAPH.**  
**NO DRAWING REQUIRED.**  
**NO HAND WORK NECESSARY.**

SEND COPY **CHEAP, ARTISTIC**  
**CROSSCUP & WEST ENG. CO.**  
FOR ESTIMATE 907 FILBERT ST. PHILA-PA.

EVERY FLORIST,  
NURSERYMAN  
AND SEEDSMAN  
Should have our NEW

TRADE DIRECTORY

PRICE ONLY ONE DOLLAR.  
AMERICAN FLORIST COMPANY  
CHICAGO.

## DON'T BUY

A NEW BOILER — until you have full particulars of — BURT'S LITTLE GIANT

Copper Boiler—suitable for dwellings or greenhouses—is simple and economical. No other boiler used in the extensive greenhouses of the inventor.

SEND FOR CIRCULAR.

ALBERT BURT, Florist,

9 Oakwood Avenue,

SYRACUSE, N. Y.



FOR THE TRADE.  
FLORAL WIRE DESIGNS.

JAS. GRIFFITH,

THE PIONEER MANUFACTURER IN THE WEST.

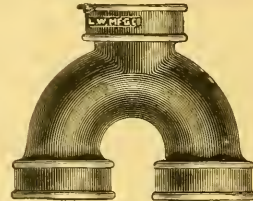
308 Main Street,

CINCINNATI, OHIO.

SEND FOR WHOLESALE PRICE LIST.



## Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

## GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

Mention American Florist.

L. Wolff Mfg. Co., 93 to 111 W. Lake St. CHICAGO

ESTABLISHED 1828.

Greenhouse Pipe,

FITTINGS

— AND —

VALVES,

STABLE FITTINGS.



Fountains,

VASES,

SETTEES,

ETC., ETC.

THE J. L. MOTT IRON WORKS,

88 & 90 BEEKMAN ST.,  
NEW YORK.

307 & 309 WABASH AVE.,  
CHICAGO.

SASH BARS MADE OF CLEAR  
CYPRESS LUMBER.

Equal to Red Cedar in durability Plain Bars 1 3/4 x 1 1/2 inches kept in stock. Price  
2 cents per lineal foot. F. O. B.

Lockland Lumber Company, Lockland, Hamilton County Ohio.

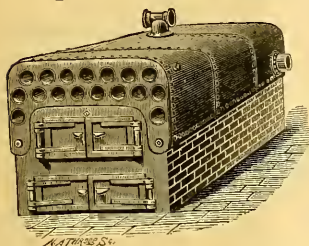


ESTABLISHED 1854.

## Devine's Boiler Works

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers.



Capacity from 350 to 10,000 feet of four-inch pipe.  
Send for New List.

PETER DEVINE,

387 S. CANAL ST.,

CHICAGO.

GLASS &amp; PAINTS

— FOR —

GREENHOUSEMEN

W. C. PEALE &amp; BRO.

332 &amp; 334 CENTRAL AVE., CINCINNATI, O.

Write for Prices, or consult Cincinnati Mkt Report in this Paper

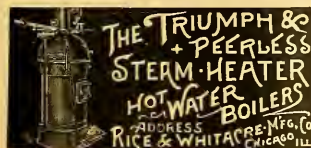
ESTABLISHED, 1866.

Floral Wire Designs,

Manufactured by

N. STEFFENS,

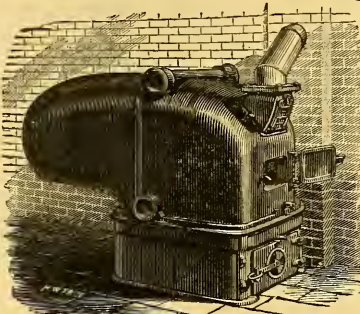
335 East 21st Street, - NEW YORK.



## Greenhouse Heating AND Ventilating

HITCHINGS &amp; CO.

233 Mercer Street, New York.

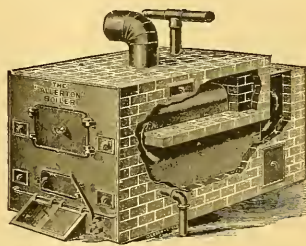
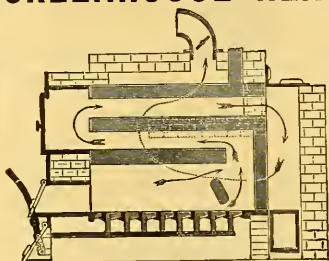


Five Patterns of Boilers,  
Eighteen Sizes,  
Corrugated Fire Box Boilers  
Saddle Boilers,  
Conical Boilers,  
Base Burning Water Heaters

Perfect Sash Raising Apparatus.

Send 4 cents postage for Illustrated Catalogue.

## GREENHOUSE HEATING APPARATUS.



THE "ALLERTON" BOILER.

## WROUGHT WELDED BOILERS

— WILL NOT CRACK LIKE CAST IRON. —

— NO SEAMS OR RIVETS TO BECOME LEAKY. —

SEVEN PATTERNS. FORTY-SIX SIZES.

Suitable for Hard or Soft Coal, Gas-Coke or Wood.

Greenhouse pipes and fittings with improved rubber ring joints as used in England, by which a perfect joint can be made in one minute and at half the cost of the old-fashioned calked joints.

## — \* — GOLD AND SILVER MEDALS. — \*

Awarded to our Boilers at London, Paris, Brussels, Berlin, Manchester, Birmingham, &c., after actual working tests against all comers.

Write for Catalogues.

## ECLIPSE MANUFACTURING COMPANY,

125 South Clinton Street, near Monroe.

CHICAGO, ILL.

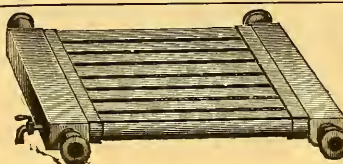
## DICK'S HOT WATER GRATES

Are more economical in fuel and will last THREE TIMES as long as the solid grates; they can be used in connection with Hot Air Flues. Send for circular of

TUBULAR SADDLE BOILERS AND GRATES'

TO JOHN DICK, JR.,

273 South 11th St., Philadelphia, Pa.





## Index to Advertisers.

Advertising Rates, etc.	13	Krick, W. C.	19
Allen, W. S.	13	Kritenberg, Oscar R.	21
American Florist Co.	13	Kuehn, C. A.	21
Baker, E.	13	Lalonde, J. M.	13
Bakker Bros.	16	Lockwood, Lumber Co.	22
Bayersdorffer, M. M. &	16	Matthews, Wm.	22
Beckwith & Co.	22	McAllister, F. E.	17
Beerhorst & Co.	16	McFarland, J. Horace.	17
Benz, Albert.	16	Michel Plant & Seed Co.	17
Berger, H. H. & Co.	21	Monon Route.	21
Blanc, A.	18	Mott, J. L., Iron Wks.	21
Block, Theo.	18	Mullen, Geo. J.	21
Brackenridge & Co.	21	Myers & Co.	24
Brague, L. H.	18	Penie, W. C. & Bro.	24
Brenneman & Peter-	18	Perkins, John J.	15
son.	16	Perkins, J. N.	15
Bronhorst, Herman.	16	Phila. Horticulture	15
Burt, Albert.	22	Sign Co.	18
Croscup & West Eng.	22	Pira, F. H.	16
Deakin, Robt. T. & Co.	15	Price, Charles S.	20
De Veer, J. A.	17	Pringle & Horsford.	21
Davis, Peter.	24	Quaker Machine Wks.	18
Dick, John Jr.	23	Radman, Wm.	21
Dillon, J. L.	11	Reed & Keller.	21
Dreer, Henry A.	18	Rice & Whitcomb Mfg.	23
Dutchess Nurseries.	19	Co.	23
Eames, H. W. & Co.	11	Robker, Aug. & Sons.	17
Edwards Mfg. Co.	11	Rose Mfg. Co.	19
Elliot, B. A. Co.	11	Ross & Milling.	13
Exeter Machine Wks.	24	Schall, Jacob.	11
Fassett, F. E. & Bro.	16	Scollay, John A.	24
Finch & Co.	21	Segers Bros.	19
Gallagher, M. F.	11	Segers & Co.	19
Garfield Park Rose Co.	11	Sheppard, E. & Sons.	17
Gasser, J. M.	24	Shelmire, W. R.	21
Germond, W. C.	11	Sheridan, J. J.	15
Giddings, A.	16	Siebrecht & Wadley.	21
Griffin, Jas.	22	Situations, Wants etc.	31
Growth, Henry J.	15	Smith & Smith.	19
Hales, H. W.	15	Solly, Geo. A. & Son.	15
Hallock & Thorne.	17	Stevens, N.	23
Hammond & Hunter.	13	Stewart, Wm. J.	15
Hammond's Sing Shot.	19	Storrs & Harrison Co.	15
Hardt, Thos. G.	19	Strass, C. E. & Co.	15
Harvey, J. J.	19	Thomson, Mrs. J. S. R.	17
Henderson, Peter.	21	Trischler & Sons.	21
Herr, Albert.	21	Ude, J. W.	24
Herr, D. K.	21	Van der Schol, R. & Son.	17
Higley, Henry G.	16	Vandine, J. C.	16
Hill & Co.	11	Ware, Thos. S.	19, 21
Hippard, E.	16	Weathered, Thos. W.	21
Hitchings & Co.	16	Welch Bros.	15
Houker, H. M.	22	Whitdin Pottery Co.	15
Huet, Lenault.	15	Wilks, S. Mfg. Co.	24
Hutchinson Bros.	16	Wilson Bros.	21
Ives, J. H.	22	Wilson, Wm. C.	16
Jewett, Z. K.	21	Witbold, Geo.	21
Joosten, C. H.	13	Wolf, L. Mfg. Co.	22
Keyes, John.	13	Wood, I. C. & Bro.	11
King, James.	17	Yong, Thos. Jr. & Co.	15
Krelage, E. H. & Son.	16	Zirngiebel, D.	21

## Conservatories

## GREENHOUSES, ETC.

Erected in any part of the U. S. or Canada  
Glazed on the

Helliwell Pat. Imperishable System  
OR WITH PUTTY.

For further testimonials, illustrated catalogue or  
estimates address

JOSEPHUS PLENTY.

HORTICULTURAL AND SKYLIGHT WORKS.

Offices, 144 Pearl Street, NEW YORK.



J. M. GASSER'S

PAT. ZINC JOINTS

For Butting Glass without Laps.

Makes it air and water tight. No breakage from  
front. Saves time and glass.  
FLORIST'S WATCHMAN, for Flues and Hot  
Water, \$5.00; for Steam, \$3.00. It will ring a bell  
when the temperature changes, and ring when the  
steam goes down.

J. M. GASSER.

71 Euclid Avenue, CLEVELAND, OHIO.  
Mention American Florist.

—FOR—

PAMPAS :- PLUMES

ADDRESS THE GROWER,

J. W. UDE, Santa Barbara, Cal.,

—OR—

A. VIRGIEN, P. O. Box 319, New York City.



Sectional View.

## IMPROVED BOILERS

FOR HEATING

## GREENHOUSES

GRAPERIES, POULTRY-HOUSES, ETC.

ALSO FOR HEATING

WITH HOT WATER UNDER PRESSURE.

VENTILATING APPARATUS

For Raising Sashes in Greenhouses.

GALVANIZED SCREW EYES

And Wire for Trellis Work.

Send for Catalogue.

Thos. W. Weathered,  
46 & 48 MARION ST., N. Y.

Mention American Florist.



## HEATING APPARATUS

FOR

Greenhouses, Etc.

CAST IRON PIPE AND FITTINGS.

JOHN A. SCOLLAY,

74 & 76 Myrtle Ave.,

Brooklyn, N. Y.



## Improved Hot Water Boilers

For Heating

Greenhouses, Graperies,

CONSERVATORIES, ETC.

ALSO

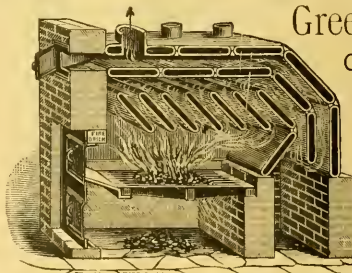
Cast Iron Pipe, Fittings, Valves and  
all Material for Heating by  
Hot Water.

Send for Catalogue.

MYERS & CO.

1173 So. 9th St.,

PHILADELPHIA.



## GREENHOUSE HEATING

BY STEAM, BY HOT WATER, BY COMBINATION STEAM AND WATER.

EXETER MACHINE WORKS,

19 FEDERAL ST., BOSTON, MASS.

WORKS EXETER, N. H.

THE CELEBRATED  
WILKS WATER HEATER!

For Heating

GREENHOUSES,

DWELLINGS,

POULTRY HOUSES,

STORES, BATH TUBS,

ETC., ETC.



Send for Price List.

S. Wilks Mfg. Co.,

Cor. Monroe & Clinton Sts., Chicago

## BOUND VOLUMES OF

THE

## AMERICAN FLORIST

VOLUME II.

Handsomely bound in cloth with leather back  
and corners, and title lettered on back in gilt,  
may now be had from this office.

Price, \$2.25.

AMERICAN FLORIST CO.,

54 LA SALLE ST. CHICAGO.

# THE AMERICAN FLORIST



*America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."*

Vol. III.

CONVENTION SUPPLEMENT.

No. 50.

## THE AMERICAN FLORIST

Copyright, 1887, by American Florist Company  
Entered as second-class mail matter.

CHICAGO is a summer resort is it not? HOW DO YOU like the Convention hall? DON'T FAIL to take in the exhibits in the lower hall.

OVER 500 were present at the opening Tuesday morning.

The membership was largely increased by arrivals on Tuesday afternoon.

MR. ANDERSON likes to get at the point. It is a most excellent thing to get at.

ONE INDIANA member didn't take any chances of being left. He reached the city on the 9th inst.

MR. THORPE's able paper on Hybridization was discussed by Messrs Bennett, May, Heffron and Starr.

IF YOUR subscription to the AMERICAN FLORIST is about to expire, why not renew it while you are here?

INDICATIONS now are that the membership list of those actually in attendance at the meeting will exceed the Philadelphia list by 75 or 100 names.

HAVE YOU registered your name in the book provided by the local club? If not, you should do so at once and secure tickets for the complimentary excursion Friday.

MR. HILL's rose paper was certainly well received. The hearty applause at its completion showed how well it was appreciated. Mr. Hill knows several things about roses.

HENRY BENNETT of Shepperton, England, is present. The noted rosarian expresses himself as greatly pleased with what little he has already seen of America, this being his first visit to this side of the Atlantic. He came from New York on the B. & O. special with the New York and Philadelphia boys.

SECRETARY ESLER of the Florists' Hall Association can be found at the society headquarters in Grand Pacific hotel, to receive applications for insurance and give all information on the subject. During business sessions of the society Mr. Esler will have a desk in the Exhibition hall where cards may be left for him and circulars obtained.

A SAD ACCIDENT.—MR. Otto Schucht, of Sheboygan, Wis., a delegate to the convention, was unfortunate enough to meet with a serious accident Monday. He is stopping at 215 Evanston avenue, and in boarding a street car he slipped, fell under the wheels and had both legs so badly crushed that it is believed he will be crippled for life. A subscription of \$150 was raised among the members present and sent to him.

### Opening of the Third Annual Meeting.

Mr. Vaughan in announcing the absence of the mayor, said:

LADIES AND GENTLEMEN:—I expected this morning to introduce our mayor to extend to you a formal greeting and welcome to Chicago, but unfortunately our mayor is absent, and that formal presentation of the freedom of the city I must ask you to consider as already done.

Certain it is that Chicago has an open-handed welcome for all. It is possibly true that her business men are not so careful of the social hospitalities as those of some older cities; it is possibly true that the disposition here which puts business before all other interests renders us more careless of those graceful courtesies of life, which develop so well in older communities where at least a portion of the population find that leisure for recreation, and aid by it in placing our life on a higher plane.

If we are not at that point so nearly as we could wish, your visit here is most welcome as tending greatly to that desirable end. But as I have said Chicago welcomes all. Her streets are wide, her hotels many and large, her railroads reach to every point, and the largest possible crowd is the greatest delight of her people. Finally, and more directly, the florists' trade in our city and our parks is as well represented as any city can be, and one and all in the business here extend to you who have gathered with us, a most cordial welcome. And we trust this meeting will well repay your generous expense of time and travel. We hope you can and will make yourselves at home.

Ladies and gentlemen I now take great pleasure in introducing one already known to most of you—a man of whom I should be glad to speak such words of praise as might fit him, but that such words fail me—the president of your society, Mr. Robert Craig.

To this Mr. Wm. Elliott, of New York, replied.

### Opening Address by President Robert Craig.

LADIES AND GENTLEMEN.—We are assembled this morning, under circumstances most pleasant, at the Opening session of the Third Annual Convention of our young society. The number in attendance and the interest manifested in an enterprise so new, must be extremely gratifying to all concerned. The idea of organizing a florist's society on a broad, national basis, first grew in the minds of western men, and its first regular meeting was held in a western city. When the matter was first suggested some four years ago, one of our foremost eastern florists, while heartily approving of the object, doubted the practicability of the

scheme. "It would be a grand thing if it could be carried out," he said "but I am afraid the florists or, at least, any great number of them will not travel long distances to attend the meetings." That gentleman is here this morning, and I am sure, is agreeably disappointed at the numbers who have, from all sections of this broad land, met here to-day to consider and to discuss those things which tend to the advancement of our calling.

To my mind, the organization of this society is the best thing that has ever happened to the florists of America; although so young it has already stimulated activity in all departments of the business, diffused much knowledge and promoted and developed a fraternal spirit and hearty good feeling which is most desirable; it has been instrumental in defeating a proposed obnoxious change in the postal laws, which if passed would have been a great loss to those of us who do a mailing trade; it has also, thanks to the earnestness and persistence of a few devoted members, placed the matter of hail insurance on a practical footing so that all who desire to participate in its benefits may do so, without delay. Its exhibition of plants, improved heating apparatus, mechanical appliances, florists' supplies etc., have been interesting and instructive and must at each succeeding meeting, prove to be a leading and valuable feature all who have anything of value to offer should avail themselves of this annual opportunity of bringing to the notice of those most interested, the fruits of their work.

The essays and discussions are educational in a high degree; it is impossible that so many practical and thoughtful men can meet together to exchange opinions on matters of vital importance to all without developing much that is of mutual benefit. The fact that the meetings are held in such widely separated sections must in itself, tend to enlarge the views and broaden the mental vision of its members; it is an old and true adage that "When you go from home, you go to school," all good ideas do not grow in the west, nor the east, but are liable to crop out anywhere and those who travel with open eyes, can always learn something.

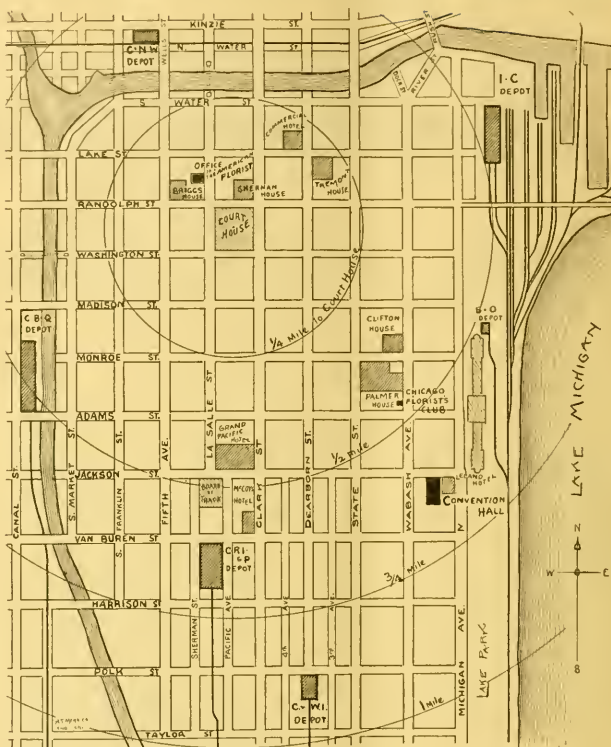
On the whole, we have made a good beginning; of course, there have been mistakes made in the management; but none very serious, only such as were to be expected in the early history of our growth and are inseparable from the inherent weakness of poor human nature without experience; but we will improve year by year, and if we gain, as the enterprise deserves, the hearty support of those interested in horticulture, the society must become a great power for good. The society has done wisely in not restricting its membership to any class but has thrown open wide its doors



to welcome all friends of the art; its chief object is to cultivate in the people of America, a taste and love for plants and flowers, and it should endeavor to get into its ranks, not only all the commercial florists and those engaged in supplying their various wants, but should exert every effort to interest gardeners on public and private grounds; on this class much depends; to them is entrusted a great work in the advancement of horticultural taste, and if it be intelligently done, they will, in the growing appreciation of the American public, find due encouragement. We can congratulate ourselves on this ever-increasing taste for plants and flowers; evidences of which meet us at every point. The improvement in our parks shows it and I was forcibly reminded of the fact on our journey out to this meeting; at almost every railroad station, the surroundings were made pleasant by the well-kept lawns and flower beds; a few years ago nothing of the kind was to be seen and the indications are, that soon the growing taste will demand that these places be made attractive in winter, as well as summer by the use of the beautiful hardy evergreens which are at our command, and to which new varieties are constantly being added. This class of plants is extremely useful, when the frost and snow are present; their beauty is not affected; they are quite as valuable as the flowers of summer; it is only necessary that the example be set at a few prominent points to be followed in all directions. If these collections were correctly and permanently labeled, what teachers of the people they would be, and how the desire would spring up in the hearts of all to beautify their home surroundings in like manner.

But, to return to the society and its work; the greatest success will be attained only when each and every member does his share of work, and the question arises, in what way shall our efforts be put forth? I know of no better way than to organize local clubs in every city and town, at whose meetings matters of general interest may be discussed and concert of action secured; doubtless, the most these local clubs can take up is the improvement of our exhibitions; these afford the best means of showing the possibilities of our art; many an enthusiastic amateur and liberal patron has had his first love awakened at these shows, and too much cannot be done to improve their character. As a rule, they have not received the general support they deserve, the work has been left to a small minority, with consequent meagre results. When an exhibition is attempted, every gardener and florist in the neighborhood should, as a matter of personal pride and duty, do his part in the work. It is often complained that the public does not sufficiently appreciate floral shows. Is not this because they are so frequently unworthy? "As we sow, so shall we also reap;" if we open to the people a good show we can depend upon moral and financial support. Speaking for Philadelphia, I can say, that we have already felt the influence of the club which was organized under the auspices of this society, and I can, confidently promise those who may visit our city next November, the finest chrysanthemum show this country has ever seen. On every hand the growers are at work and the general interest awakened is the direct result of plans laid at our meetings.

On the whole, the outlook for horticulture in America is encouraging. The



SEE DIRECTIONS for reaching any of the Parks on last page.

nation is young and prosperous, with unbounded resources, and ever-increasing wealth; the enterprise and activity of its citizens are marvelous; the freedom from the burdens of large standing armies and war taxes, which this country enjoys, offer the greatest encouragement for the development of intelligence and skill; the nations of the old world suffer from these grievous burdens, and the struggle for existence is thereby made more severe. In America, every industrious man (no matter how humble his position) can afford to indulge more or less, in matters of taste, and it is our mission to invite him to spend a part of his time in the garden, and to assure him that he cannot find any higher pleasure on earth, than its delights afford.

A full band of Kazoos accompanied the special. It is stated that Farson has but one lung left. The other was blown out through the instrument. Lonsdale caught it in his B flat cornet.

**FLORISTS' CLUBS.**—Philadelphia's example in forming a local organization of the trade has been followed by Chicago, Boston, Baltimore, Cleveland, New York and St. Louis. When may we expect to hear from Cincinnati, Pittsburgh, Buffalo, St. Paul and Minneapolis, Louisville, San Francisco, Detroit, Kansas City and other cities where the trade is strong?

#### List of Members Present.

Allen C E. Brattleboro, Vt.  
Allen W S, New York, N. Y.  
Allen Geo F, Chicago.  
Andrews Mrs W W, Jackson, Mich.  
Appleton Thos, Lake Forest, Ill.  
Anderson Chas and wife, Flushing, N. Y.  
Asmus Ernst, Hoboken, N. J.  
Anthony J T, Chicago.  
Armstrong L, Kirkwood, Mo.  
Arnett M W, Dunreith, Ind.  
Anger B L, Ft Wayne, Ind.  
Austin Ed, Ellingham, Ill.  
Balds Jno, Cleveland.  
Barr F D, Davenport, Ia.  
Ball Peter, Malden, Mass.  
Ball C D, Philadelphia.  
Baker W J, Philadelphia.  
Baker J B, Fort Worth, Tex.  
Baird R, Philadelphia.  
Bayersdorfer Harry, Philadelphia.  
Bentley F F, Chicago.  
Berterman Wm G, Indianapolis, Ind.  
Bennett Jos, Montreal, Can.  
Bennett Henry, Shepherton-on-Thames, London, England.  
Bearn David, Philadelphia.  
Bergen F W, New York.  
Bentley Mrs A C, Dubuque, Ia.  
Billis F L, Davenport, Ia.  
Bishop Wm R, Burlington, N. J.  
Bittin Robt C, Lake Forest, Ill.  
Bisset Miss Annie, Philadelphia.  
Bristol Miss Emma R, Topeka, Kan.  
Bristol Miss J, Topeka, Kan.  
Brown, Alex, Jackson, Mich.  
Brown Chas, Canton, O.  
Brown A C, Springfield, Ill.  
Brown A D, St Joseph, Mo.  
Bryant H, St Albans, Vt.

- Blackman Wm, Evansville, Ind.  
Boehme A, Battle Creek, Mich.  
Burlingame Wm, Exeter, N. H.  
Burton John, Chestnut Hill, Pa.  
Burrush G A, Providence, R. I.  
Bussard Henri Youkers, N. Y.  
Bunde A H, St Paul, Minn.  
Brudahl J P, Racine, Wis.  
Brock Fred, Bellevue, Pa.  
Burki Chas, Canton, O.  
Butter H, Chicago.  
Bliss Frank D, Englewood, Ill.  
Burdall W W, Chicago.  
Balmer Adam, Danville, Ill.  
Baneroff Jos, Cedar Rapids, Ia.  
Bell W T, Franklin, Pa.  
Bondahl J P, Racine, Wis.  
Bonner E, Xenia, O.  
Bonshall Jos E, Salem, O.  
Bunney H W, St Paul, Minn.  
Butz Wm T, New Castle, Pa.  
Chalvert E S, Lake Forest, Ill.  
Calvert T, Lake Forest, Ill.  
Carpent Harry, Williamsport, Pa.  
Cole C C, Des Moines, Ia.  
Collins H A and wife, Havana, Ill.  
Cole Levant, Kalamaazoo, Mich.  
Calder A P, Boston, Mass.  
Campbell Mrs E G, Cleveland.  
Chandler B B, Hyde Park, Mass.  
Cox G H, Towanda, Pa.  
Crowe Peter, Utica, N. Y.  
Campbell C G, Baltimore, Md.  
Campbell Jos H, Philadelphia.  
Cardlege Thomas, Philadelphia.  
Casper L A and wife, Council Bluffs, Ia.  
Clark Wm, Colorado Springs, Col.  
Colfesh Jno W, Philadelphia.  
Courtney F, Wilmington, Del.  
Craig Robert and wife, Philadelphia.  
Criticelli B P, Cincinnati.  
Carmody J D, Evansville, Ind.  
Clark Sidney, Lake Forest, Ill.  
Corton Theo, Wright's Grove, Ill.  
Crabb Geo F, Grand Rapids, Mich.  
Craig Jno, London, Ont.  
Curran Jos, Chicago.  
Canfield A C, Springfield, Ill.  
Congdon A R, Oberlin, O.  
Connon Chas, St Louis.  
Cox D W, Crawfordsville, Ind.  
Cole Bros, Peoria, Ill.  
Cole L, Kalamaazoo, Mich.  
Crall Chas S, Monongahela City, Pa.  
Cunn Wm, Milwaukee.  
Danke H A, New York.  
Whitall A, Fairfield, Conn.  
De Muth Chas E, Connerville, Pa.  
Drummi Robt, Ft Worth, Tex.  
Devine Peter, Chicago.  
Donovan R J, Hayslock, Ill.  
Dierman O A, New Haven, Conn.  
Dillon, J. L., Bloomsburg, Pa.  
Don A L, New York.  
Dorrance B F, Wilkesbarre, Pa.  
Dilger F P, Milwaukee.  
Dilger M P, Milwaukee.  
Dorner Fred, La Fayette, Ind.  
Dudley C P, Parkersburg, W. Va.  
Dunkley Jos, Kalamaazoo, Mich.  
Dewar M, Lake Forest, Ill.  
Eadie Andrew, Cleveland.  
Eadie Mrs Jas, Cleveland.  
Edwards Wm, Milwaukee.  
Eldridge Wm M, Wilkesbarre, Pa.  
Elliot W, New York.  
Ellison W, St. Louis.  
Esler L A, Saddle River, N. J.  
Esler J G, Saddle River, N. J.  
Evans Chas F, Philadelphia.  
Evans G A and wife, Philadelphia.  
Evans, Maurics, Cleveland.  
Evans J A, Richmond, Ind.  
Farson D D L, Philadelphia.  
Fraser Wm, Baltimore, Md.  
Foster F G, Hamilton, Ont.  
Fuller D B, Chicago.  
Fuller W O, Henderson, Ky.  
Ferguson J B, Pittsburgh.  
Fisher Jacob, Toledo, O.  
Fontaine F, Racine, Wis.  
Fryer Isaac, Kentville, Ind.  
Franks Thos, Champaign, Ill.  
Freytag Jacob, Milwaukee.  
Gaylung Avery and wife, Denver, Col.  
Gano N H, Richmond, Ind.  
Grant Miss May, Cleveland.  
Grey Benj, Malden, Mass.  
Gasser J M and wife, Cleveland, O.  
Gee John R, Bloomington, Ill.  
George Jas, Pittsburg, Pa.  
Guy E W, Belleville, Ill.  
Gallager M L, Chicago.  
Grant G L, Chicago, Am. Florist.  
Gammage Wm, London, Ont.  
Gardner R W, Freeport, Ill.  
Giddings A, Danville, Ill.  
Giddings E M, Corfu, N. Y.  
Grabham A, Cleveland.  
Good Jno, Hyde Park, Ill.  
Gardner Mrs S C, Hinsdale, Ill.  
Genteman C F W, Quincy, Ill.  
Gordan Mrs Geo, Milwaukee.  
Greenburg H S, Chicago.  
George Robt and wife, Painesville, O.  
Halle H F, Chicago.  
Hallock E V and wife, Queens, N. Y.  
Harris W K, Philadelphia.  
Hart H A, Cleveland, O.  
Harkett W A, Dubuque, Ia.  
Helms Walter and wife, Janesville, Wis.  
Hill W C and wife, Streator, Ill.  
Hoffmeister B L, Ft. Madison, Ia.  
Hughes H R, Chicago.  
Huscroft W G, Steubenville, O.  
Hayden M F, Wilmington, Del.  
Heint Jno G, Terre Haute, Ind.  
Hollenhal Jno R, Columbus, O.  
Heron Richard, Philadelphia.  
Hess C, Waverly, Md.  
Higley Henry G and wife, Cedar Rapids, Hippard E, Youngstown O.  
Hammes H, Chicago.  
Hansen Henry, Haverock, Ill.  
Hartwig Chas, Wright's Grove, Ill.  
Herswirth P J, Chicago.  
Heffron Walter, Washnton Heights, Ill.  
Henderson Peter, New York.  
Hill E G and wife, Richmond, Ind.  
Hopkinson Thos, Chicago.  
Hunt M A, Terre Haute, Ind.  
Hancock Jas and wife, Gd Haven, Mich.  
Hatfield Arthur, Chicago.  
Hatfield Louis, Chicago.  
Hughes W, Hillsdale, Mich.  
Hild Geo, Lake Forest, Ill.  
Hovey J A, Grand Rapids, Mich.  
Howe Timothy, Lake Forest, Ill.  
Haentze E, Fond du Lac, Wis.  
Heffron D S, Washington Heights, Ill.  
Hoppentrath C, Milwaukee.  
Hunfied S, Cochran, Ind.  
Hall F A, Milwaukee.  
Hamilton W T, Louisville, Ky.  
Heint Jos, Jacksonville, Ill.  
Heint Louis, Terre Haute, Ind.  
Hennecke C, Milwaukee.  
Hoyt Wm, Chicago.  
Ives J H, Danbury, Conn.  
Jackson A V, Bowmanville, Ill.  
Jackson A T, Bowmanville, Ill.  
Jordan J M, St. Louis.  
Juengel Chas A, St. Louis.  
Jones Jno, Buffalo, N. Y.  
Jenkins T B, Rochester, N. Y.  
Jewett Z K, Sparta, Wis.  
Kanst Fred'k, Hyde Park, Ill.  
Keenan T F, Chicago.  
Kellar J J, Indianapolis, Ind.  
Kennicott Flint, Chicago.  
King James, Chicago.  
Klehm Geo C, Arlington Heights, Ill.  
Kretling Walter, Chicago.  
Krohn Paul, Chicago.  
Kyle M F, Hyde Park, Ill.  
Kemble W O, Oskaloosa, Ia.  
Kranz C, Muscatine, Ia.  
Kranz E, Muscatine, Ia.  
Kitzerow Wm and wife, Milwaukee.  
Kressler Wm, Pittsburg.  
Kuehn C A, St. Louis.  
Kellings Geo M, Pleasant Hill, Mo.  
King F J, Ottawa, Ill.  
Klothen E G, Joliet, Ill.  
Koethen E L, Zanesville, O.  
Koehler W H, Philadelphia.  
Kramer J A, Marion, Ia.  
Killen J E, Chicago.  
Kriek W C, Brooklyn, N. Y.  
Kramer, I. N., Marion, Ia.  
Kropf J O, Collinsville, Ill.  
Kraiser Chas, St. Paul, Minn.  
Kriek Geo, Queens, N. Y.  
Kirchgraber Jno, Mattion, Ill.  
Krecht F J, Ft Wayne, Ind.  
Krueger Aug, Meadville, Pa.  
Keller Jno B, Rochester, N. Y.  
Laisle C, Keokuk, Ia.  
Lamborn Leroy L, Alliance O.  
Lash Jacob Jr, Wheeling, W. Va.  
Lempke F L, Somerville, Mass.  
Leitch Wm, Cleveland.  
Langstaff W, Indianapolis, Ind.  
Larsen J, Indianapolis.  
Lawrence R F, Buffalo.  
Long D B, Buffalo.  
La Roche Mack, Philadelphia.  
Leahy G H, West Grove, Pa.  
Lepia Mrs H, Hastings, Neb.  
Longshore F H, Newton, Pa.  
Lodder F, Hamilton, O.  
Lodger Jno, Hamilton, O.  
Lantz August, Philadelphia.  
Lane John, Chicago.  
Leonard S F, Chicago.  
Lonsdale Edwin, Philadelphia.  
Lucien F, New Orleans.  
Le Febvre A, North Greenfield, Wis.  
McManus Jno, Cleveland.  
Markey W, Ft Wayne, Ind.  
Mathews Wm, Utica, N. Y.  
Mathieson Fred, Watertown, Mass.  
Miller F A, Indianapolis.  
Montgomery Alex, Natick, Mass.  
Moore Henry, Memphis, Tenn.  
Morgan Jas, Auburn, N. Y.  
Mullen Geo, Boston.  
McConnell Alex, New York.  
McCrea J W, Battle Creek, Mich.  
Mackenzie C R, Philadelphia.  
Maybury Thos, Pittsburgh.  
Messeburg Gustavus, Flatbush, N. Y.  
Michel Henry, St. Louis.  
Moon S C, Morrisville, Pa.  
McAdams A, Hyde Park, Ill.  
Malsh M, Chicago.  
May John N and wife, Summit, N. J.  
Miller Geo, Wright's Grove, Chicago.  
Murdoch A M, Pittsburg.  
McClough Albert, Cincinnati.  
Malmquist G, Minneapolis, Minn.  
Mann Wm, Louisville, Ky.  
Masterson Lawrence, Lake Forest, Ill.  
Mendenhall Mrs A G, Minneapolis.  
Mendenhall R G, Minneapolis.  
Murray Jas C, Peoria, Ill.  
Murphy R J, Beechwood, O.  
Miller R J, Downer's Grove, Ill.  
Milliken A M Crown Point, Ind.  
Milton Mansfield, Youngstown, O.  
Murphy C H, Urbana, O.  
McCluer G W, Champaign, Ill.  
McIntyre J W, Fulton, Mo.  
McKenna Jas, Montreal, Can.  
Maraschuetz Jos, Philadelphia.  
Miles Isaac, Oshkosh, Wis.  
Nielsen Hans, St Joseph, Mo.  
Nelson Jno, Oshkosh, Wis.  
Nelson S G, Chicago.  
Newett Alex, Chicago.  
Newett W G, Chicago.  
Nolan W C and wife, Cincinnati.  
O'Neill B, Elgin, Ill.  
Olson M, Chicago.  
Packard E T, Chicago.  
Pape Wm, St. Louis.  
Parsons E W, Westchester, N. Y.  
Price Chas S, Lansdowne, Pa.  
Page M E, Chicago.  
Purvis R J, Havelock, Ill.  
Penman J A, Boston.  
Peterson J A, Cincinnati.  
PHELPS H L, Springfield, Ill.  
Petersen A N, Crown Point, Conn.  
Powell Mrs W O, St Peter, Minn.  
Probeck O J, Cleveland.  
Pickett A R, Tremont, O.  
Power E, Frankfort, Ky.  
Pierce L B, Tallmadge, O.  
Quinlan P R, Syracuse, N. Y.  
Quirk Mrs, Flushing, N. Y.  
Raynolds Jas D, Riverside, Ill.  
Reissig Chas, Chicago.  
Remington J C, Sioux City, Ia.  
Renwick T R, Grand Rapids, Mich.  
Rohrer H D, Lancaster, Pa.  
Romans John B, Columbus, O.  
Rice M, Philadelphia.  
Reed C H, Birmingham, Ala.  
Reeves Geo F, Indianapolis.  
Robinson J D, Bloomington, Ill.  
Ringrose G W, Wauwatosa, Wis.  
Rooks O P, Gardonia, Fla.  
Richter J, Allegheny City, Pa.  
Ruston Thos C, Riverside, Ill.  
Schmitt A, Glenville, O.  
Schramm B, Toledo, O.  
Serim C, Ottawa, Ont.  
Schlachter H, Winton Place, O.  
Shepherd Fred, Jackson, Mich.  
Stromback C, Chicago.  
Stielow F, Niles Center, Ill.  
Seidewitz E A, Annapolis, Md.  
Starr Chas T and wife, Avondale, Pa.  
Steurns A M, Lockland O.  
Swanson Aug S, St Paul, Minn.  
Swayne Wm, Kennett Square, Pa.  
Schiller H, Niles Center, Ill.  
Siebrecht Louis, Queens, N. Y.  
Siebrecht H A, New York.  
Singler N, Washington Heights, Ill.  
Smith C A, Minneapolis, Minn.  
Smith Elmer D, Adrian, Mich.  
Stewart Wm, Pittsburgh.  
Schucht Otto, Sheboygan, Wis.  
Scott Wm, Buffalo.  
Siebert C T, Pittsburgh.  
Smith Chas J, Exeter, N. H.  
Suder Mrs E, Toledo, O.  
Sawyer A W, Sycamore, Ill.  
Schray Wm, St. Louis.  
Schulz Jacob, Louisville, Ky.  
Scott D W, Galena, Ill.  
Shepherd Fred, Jackson, Mich.  
Smith M, Lake Forest, Ill.  
Starr A R, Joliet, Ill.  
Strong O H, Oil City, Pa.  
Schmeling Fred, Wauwatosa, Wis.  
Schmeling Mrs S C, Milwaukee.  
Smedley T, Stevens Point, Wis.  
Smith W E, Winona, Minn.  
Silliman I C, Chicago.  
Thorpe Jno, Queens, N. Y.  
Temple F L, Somerville, Mass.  
Thirlman Fred, Brooklyn, N. Y.  
Troxell A M, Knightstown, Ind.  
Turtle Benj, Lake Forest, Ill.  
Taylor C W, New Brighton, Pa.  
Temple J T, Davenport, Ia.  
Tesson R F, St. Louis.  
Taphin Jas, Maywood, N. J.  
Taphin Miss E L, Maywood, N. J.  
Taphin Stephen, Detroit.  
Taphin Miss Emma, Detroit.  
Teas E Y, Dunreith, Ind.  
Thompson Geo, Louisville, Ky.  
Thompson S J, Louisville.  
Turner Louis, Kenosha, Wis.  
Van Dyke Mrs E A, Shelbyville, Ill.  
Valentine W R, Cincinnati.  
VanBochere John, Kalamaazoo, Mich.  
Vestal Frank, Little Rock, Ark.  
Verburg S, Jackson, Mich.  
Vestal Geo, Little Rock, Ark.  
Vick E V, Rochester.  
Vaughan J C, Chicago.  
Vibberts W A, Chicago.  
Wallis Thos, Havelock, Ill.  
Wenderoth F B, New York.  
Whittle A E, Albany, N. Y.  
Weathered C B, New York.  
Weinar E W, Mt Vernon, N. Y.  
Wescott Jno, Philadelphia.  
Wadley A, New Britain, N. Y.  
Walker Jno, Philadelphia.  
Wall H M, New York.  
Whitnall C B and wife, Milwaukee.  
Whitcomb A and wife, Lawrence, Kan.  
Wiedey Jno, Baltimore.  
Will W F, Scranton, Pa.  
Williams A, Sharon, Pa.  
Wilson Miss, Philadelphia.  
Winter Antoine, Vest Grove, Pa.  
Wood I C and wife, Fishkill, N. Y.  
Wood E, Fishkill, N. Y.  
Walker H G, New Albany, Ind.  
Webster J F, Hamilton, Ont.  
Weinboeber E, Chicago.  
Welch P, Boston.  
Wiegand A and wife, Indianapolis.  
Williams B W, Greenville, Pa.  
Wolcott S A, Batavia, Ill.  
Walker Wm, Louisville, Ky.  
Williams E W, Pittsburgh.  
Winterstetter R, Sedamsville, O.  
Walz Fred, Cincinnati.  
Wilkins John, Chicago.  
Williams W H, Batavia.  
Wade J H, Evansville, Ind.  
Waldbart Alex, St. Louis.  
Warneke Chas, Detroit.  
Wasson A C, Detroit, Ill.  
White Hugh A, Chicago.  
Williams C O, Batavia, Ill.  
Winters Thos J, Harrisburg, Pa.  
Woods David and daughter, Pittsburg.  
Woods D R, New Brighton, Pa.  
Wood E M, Natick, Mass.  
Wunder John, Winona, Minn.  
Young Mrs R G, Michigan City, Ind.  
Young Thos Jr, New York.  
Young Wm, St. Louis.  
Zimmer Ludwig, Iron Mountain, Mich.



## The Trip from the East.

The special train left New York on time with every one on board in buoyant spirits. Arriving at Philadelphia a bountiful supper was found provided by the Philadelphia Florist Club, to which ample justice was done. After supper "all aboard" was sounded, and the train rolled forward picking up the Marylanders at Baltimore.

The magnificent grandeur of Luray cave inspired all with delight and astonishment Sunday morning; and the scenery through the Alleghenys was a treat never to be forgotten.

At Deer Park an hour was spent rambling over it and again we sped forward happily.

## GRAFTS, BUDS AND CUTTINGS.

A. Wintzer talked roses.  
Columbus joined us O. K.  
Lonsdale had time to botanize.  
G. G. Lahey was very polite.  
A. E. Whittle don't like smoke.  
May, John N. was Ed's cashier.  
The ladies stood the journey well.  
Charley Weathered slept too much.  
President Craig was happy as usual.  
W. S. Allen got his feet damp at Luray.  
Lonsdale's cheery laugh was infectious.  
Frazer made things agreeable for many.  
Its a long way to come but we liked the trip.

D. D. L. Farson on the engine! What next?

Willie, of spider fame, and Gus were mates.

Thorpe was his own bootblack and porter.

The boys from Philadelphia wore fancy badges.

Willie Elliott will go farther west to see his son in Peoria.

Taplin and Charley Anderson are still cultivating their beards.

The old men from New York were rather quick except one.

Henry Siebrecht and Esler "balled" some of the boys on Sunday.

That Hoboken sport was as lively as ever. So was the young man.

The small maps of the city sent by the FLORIST were greatly appreciated.

Manager MacKenzie did nobly for all. Mac has joined the S. A. F. It is catching.

Peter Henderson with his good nature kept up a continuous conversation with many.

Henry Bennett of rose fame was a delightful companion and wouldn't have missed the trip for anything.

H. A. Siebrecht was searching for K. Wren troches to restore his voice. The music told on him. It is stated that the grangers on the route flocked to the train at each station in open-mouthed wonder at the sounds which emanated from the train.

## ALL

## GARDEN SUPPLIES.

My Descriptive CATALOGUE and TRADE LIST for the Fall of 1887, ready SEPTEMBER 1st.

## — OF —

## BULBS, PLANTS, SEEDS

## — AND ALL —

GARDEN AND GREENHOUSE SUPPLIES  
Mailed FREE to all applicants.

ADDRESS,  
ROBT. J. HALLIDAY,

SEEDSMAN AND FLORIST,  
BALTIMORE MD.

SITUATION WANTED—By a competent gardener with 20 years experience; private place preferred. Can give good references; no objection to going east. Address, JOHN WHITAKER, care Mrs. Brewster, Lake Forest, Ill.

FOR SALE—Nursery and Florist business, fifteen years established. Large mail and catalogue trade. Yearly sales \$7,000 to \$8,000. Very low price and easy terms to a good man. Address, C. F. H. - care P. Bond, room 24 Vance Block, Indianapolis, Ind.

FOR SALE—Four greenhouses (500 ft. glass) nine miles from Chicago, three railroads, and near four cemeteries, with 100 feet ground, cheap and easy terms, in my city store with or without building and 4 year lease, with greenhouse in rear; very low rent. Address, J. K. KLEMMER, 545 W. Madison St., Chicago.

## FOR SALE.

Per 100  
C. Mermet, strong plants, 4-in. & 5-in. pots, \$10.00  
Bon Silene, " " " " " 10.00  
Poinsettias, " " " " " 10.00  
ADDRESS,

P. G. BURGEVIN, FLORIST,  
PORT CHESTER, N. Y.

## WANTED.

A first-class designer and florist for floral store in Chicago. Good wages to the right man.

Address,  
M. F. GALLAGHER,  
Monroe St. and Wabash Ave., CHICAGO.

## 4,000 SMILAX.

In 3-inch and 2 1/2-inch pots, strong plants, \$4.00 per hundred, \$3.00 per thousand.

ANDREW MEYER,  
3218 S. Jefferson Street, St. Louis, Mo.

## ROSES.

We have several thousand extra fine plants grown in 4-inch pots from two-eyed cuttings at the following low prices: Per 100  
Perles and Niphetos, \$12.00  
Mermets and La France, 12.00  
Bon Silene and Franco, 10.00

J. L. DILLON, BLOOMSBURG, PA.

## CUT FLOWERS

The choicest Cut Flowers at lowest market rates shipped C. O. D. Telephone connection. Use A. F. Code when ordering by telephone. For prices, etc., Address,

J. L. DILLON, BLOOMSBURG, PA.

## BULBS, &amp;c., FOR FLORISTS.

20,000 Hyacinth Candicans, 2 years, cheaper than can be imported. 5,000 Montbretias 3 sorts. 20,000 Gladioli, including 5,000 Lentini's Hardy Hybrids. 20,000 Double Tiger Lilies. 10,000 Flowering Shrubs for mailing—some never before offered. 5,000 new Plum, Peach and apricot, for mailing. 20,000 Anemone Dewberry from root cuttings. Price list FREE.

E. Y. TEAS, Dunreith, Ind.

## GEO. MULLEN,

17 Chapman Place (near Parker House), BOSTON, MASS.

## WHOLESALE FLORIST

And Commission Dealer in

## FRESH CUT FLOWERS

AND FLORISTS' SUPPLIES of all kinds at lowest wholesale rates. Orders by Mail, Telegraph, Telephone or Express promptly filled.

Consignments Solicited. Flowers shipped to all points.

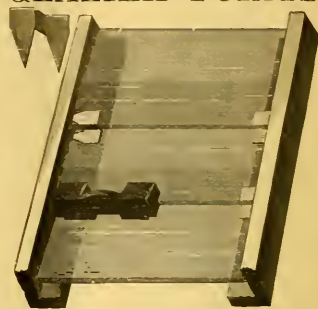
## GRAPE VINES.

1 and 2 years including all the best kinds, as,

NAGARA, BRIGHTON, WORDEN,  
MOORE'S EARLY, FOCKINGTON,  
JEFFERSON, PRENTICE, NAOMI,  
EMPIRE STATE, VERGENNES,  
AMBER QUEEN, AUG. GIANT.

1 each, 10 varieties, strong plants for \$2.00. Prices per dozen or hundred on application.  
Also Roses, H. P., Moss, Climbing Monthly in great variety. Strong 2 year Downings Gooseberries; Pionies, Dahlias, bulbs and greenhouse plants at prices to suit the times.

F. A. BALLER,  
Bloomington, Ill.

H. W. EAMES & CO.'S  
PATENT TWIN  
GLAZIER POINTS

## A USEFUL INVENTION

The twin point at the upper left hand corner of cut represents the full size of points, while the tool that is used for pushing the points into the window frame is shown on the cut.

No more Leaky Skylights! No more Slipping and Breaking of Glass in Greenhouses or Farmers' Sash.

These points the manufacturers claim are far superior to the old mode of setting glass, as they will hold each pane in place, thus not allowing the glass to slip, causing binding and consequent cracking. Each box contains 50 rights and 50 lefts. The manufacturers also make a tool for driving the points. These points are the cheapest and best, and most durable in the market, as testified to by many florists in every state in the union. Sold by most all prominent seedsmen in the country. If you don't find them at your supply stores, send direct to the manufacturer as we have made arrangements with the Adams Express Co. for low rate of express charges to promote traffic, as you need not fear charges will be too high. A Liberal Discount to the Trade.

Price 35 cents a box. Tools 15 cents each. Address all orders and communications to the manufacturers, H. W. EAMES & CO., Milford, Mass.

Preserve this advertisement for future reference and send for samples before you do your building and repairs.

Mention American Florist.

## B. B. CHANDLER,

Patentee and Manufacturer,

HYDE PARK, MASS.

PATENTED IN APRIL AND MAY 1887.

## BARBED GLAZIER POINTS,

FOR HOLDING GLASS IN SKYLIGHTS  
AND GREENHOUSES.

With these points and implement or pinners, (after a little careful practice), a man can set any lights of glass in one day as he can in three, with any other method, therefore saving from four to six dollars on each thousand lights of glass; with a surety that they will stay; frost cannot start them.

THE ABOVE CAN BE SEEN ON EXHIBITION AT CONVENTION HALL.

## TO THE TRADE.

## NEW COLEUS.

I offer 12 New Coleus of the finest colorings and markings, grown from seed of my own saving. They are suitable for bedding, having stood the test of our hot summer as well as any variety extant. They will unquestionably become popular from their

BEAUTY, ORIGINALITY AND HARDINESS.

Growers would do well to procure one or more sets this fall to propagate for spring sales.

PRICE, \$2.00 PER SET OF TWELVE.

Ready September 1, 1887.

E. BAKER,

FLORIST.

New Orleans, La.

## PAPER SEED BAGS

FOR

FLOWER AND VEGETABLE SEEDS,

CLARK BROTHERS,

MANUFACTURERS,

Samples sent FREE. 61 ANN ST., N. Y.

A FULL LINE  
OF  
Florists' Supplies

Is on Exhibition at Convention Hall by

HARRY BAYERSDORFER,

OF

M. M. BAYERSDORFER & CO.,  
PHILADELPHIA.

*Don't fail to examine this exhibit.*

MARSCHUETZ & BACHARACH,

Importers and Manufacturers of

Florists' Supplies,

25 N. 4th Street,  
PHILADELPHIA.

We call your attention to our LARGE  
DISPLAY at the Chicago Convention.

A. M. STEARNS

Will represent

The Lockland Lumber Co.,

LOCKLAND, O.

Cypress Sash Bars, &c.

H. W. WILLIAMS & SONS,  
BATAVIA, ILL.

HAVE PUTTY BULBS, PLANT LABELS,  
MAILING BOXES AND MOSS ON EXHIBI-  
TION IN THE CONVENTION HALL.  
**EXAMINE THEM.**

**NOW READY.**

New Catalogues for the  
BOSKOOP (Holland) NURSERY ASSOCIATION,

FOR —  
ROSES, RHODODENDRONS, CLEMATIS  
and other ornamental plants.

Address, C. H. JOOSTEN, Agent,  
3 Centies Slip, New York.

E. BENARD,  
ORLEANS, FRANCE.

ROSES ON THEIR OWN ROOTS  
A SPECIALTY.

Nursery stock of all descriptions. For particulars  
apply to

E. BENARD, JR.,  
Niles, Cal.

**Ed. JANSEN,**  
124 West Nineteenth Street, NEW YORK.  
Manufacturer, Importer and Dealer in  
**STRAW BASKETS WICKER GILT**  
A FULL LINE OF NOVELTIES ON EXHIBITION  
AT THE CONVENTION HALL.



**PLEASE EXAMINE**

My show of Bulbs and Florists' Goods  
generally, on Exhibit at the Armory  
Building.

I also extend a cordial invitation to all of my  
friends and members of the convention, to call at  
my place of business.

**JAMES KING,**  
170 Lake St., CHICAGO.



**Fair Hill Terra Cotta Works**

JACOB C. CASSEL,

2341 N. Seventh St., PHILADELPHIA,

Manufacturer of

FANCY RUSTIC FLOWER POTS, HANG-  
ING BASKETS, WILLOW BOXES,  
GARDEN VASES, &c.

N. B.—My goods are generally acknowledged bet-  
ter than any others. Send for Illustrated Catalogue.

**BEATTY & CO.,**

193 and 194 West Street, NEW YORK,

**LITHOGRAPHERS FOR FLORISTS AND SEEDSMEN**

SEE OUR EXHIBIT, AND BE SURE AND SECURE A COPY OF

OUR CHRYSANTHEMUM CHROMO, PRICE 50 CENTS.

Endorsed by all the leading Florists and Seedsmen,

Consult our Representative, H. M. WALL, at the Grand Pacific Hotel, as to prices for

**Catalogue Covers and Plates.**

**C. A. SMITH FLORAL CO.,**  
PLANTS AND CUT FLOWERS,  
WHOLESALE AND RETAIL.

Office and Store, 624 NICOLET AVENUE,  
Greenhouses, PORTLAND AVE. AND 35th ST., MINNEAPOLIS, MINN

**LONG NEEDLE PINES,**  
Palm Plants and Leaves.  
WILD SMILAX, very fine for Decorations.  
ALSO CANE STAKES.

A. C. OELSCHIG,  
SAVANNAH, GA.

**SMILAX**

Fine plants from 3-inch rose  
pots, ready for immediate  
planting.  
\$3 per 100; \$25 per 1,000.

**BEACH & CO.,**

RICHMOND, IND.



## ROMAN HYACINTHS

FIRST QUALITY ONLY.

\$3.50 per 100, \$30.00 per 1,000.

Our list of Bulbs will be mailed to our regular customers without request.

**HENRY A. DREER,**

714 Chestnut St.,  
PHILADELPHIA.

**A. GIDDINGS,**

DANVILLE, ILL.

Full Stock of BULBS for Fall planting.

Send for Wholesale Price List.

**BROWN & CANFIELD,**

(Successors to A. C. BROWN),

SPRINGFIELD, ILL.

Will make a specialty of **ROSES**, both Plants and Cut Flowers.

KEEP THEM IN MIND.



**C.A. KUEHN,**  
MANUFACTURER OF  
THE PATENT CLAMP  
FLORISTS'  
ORNAMENTAL  
WIRE DESIGNS,  
1432 MORGAN ST  
ST. LOUIS, MO.  
SEND FOR  
WHOLESALE  
PRICELIST.



Members are invited to visit

**VAUGHAN'S SEED STORE**

Warehouse, 146 W. WASHINGTON ST.

Cut Flower Store, 42 LA SALLE ST.

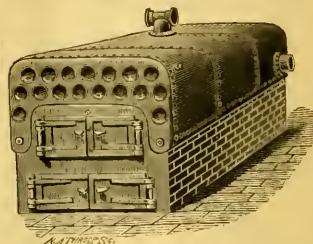
**NOW READY** ROMAN HYACINTHS,  
L. Harrisii & Flower Seed.

CALL AT

**DEVINE'S BOILER WORKS,**

387 S. Canal Street,

AND SEE THIS BOILER WHILE HERE



See our Boiler in Exhibition Hall  
at Convention,

— AND GET A —

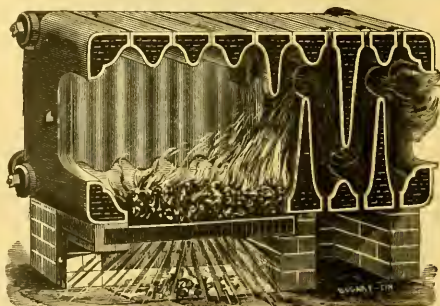
MAP OF THE CITY FREE.

The Best Boiler now made is the

**CARMODY**

Sectional Extension Return Flue Water Heater

And we can prove it.



See my Boiler on exhibition at Convention Hall.

**J. D. CARMODY, FLORIST, EVANSVILLE, IND.**

Send for the new edition "How  
to Heat a Greenhouse with Hot  
Water by High or Low Pres-  
sure."  
PRICE, 50 CENTS.  
Send for Descriptive Catalogue.

## GREENHOUSE HEATING A SPECIALTY

VENTILATING



**EXETER MACHINE WORKS**  
THE EXETER  
STEAM  
ENGINES  
THE  
EXETER  
BLOWERS  
AND  
EXHAUSTERS  
SEND TO  
EXETER, N.H.  
FOR  
DESCRIPTIVE  
AND  
ILLUSTRATED  
CIRCULARS.  
EXETER N.H.  
SALESROOM  
19  
FEDERAL ST.  
BOSTON.  
FOR  
PUBLIC  
BUILDINGS  
PRIVATE  
RESIDENCES  
AND  
GREENHOUSES.

APPARATUS.

Our system comprises Hot Water Heating, Steam Heating and the combination of Steam and Water.  
**OVER 1,000 BOILERS IN USE.**

EXETER MACHINE WORKS, 19 Federal Street, Boston, and Exeter, N. H.

We solicit correspondence from any party contemplating a change in their apparatus.

# NOTICE.

---

Having concluded my late contract with the B. A. Elliott Co. in regard to

## ✻ PURITAN, ✻

I take great pleasure in notifying the trade that I have a stock of very fine plants ready for immediate delivery.

You cannot afford to be without a few plants of this rose, for it will without question be the leading one of the season, and will be in very great demand.

Buy now that you can commence propagating in the fall.

No rose has ever received such commendation as the **PURITAN**; one Philadelphia firm has bought 6,500 plants.

Its keeping qualities are undoubted for blooms were sent to Europe and eleven days after were exhibited at the Royal Horticultural Society, where they were

✻ **AWARDED THE HIGHEST PREMIUM** ✻

that is ever given by that Society.

It is large, fragrant, pure white and can be cut with stems two feet long.

Further information can be obtained from

## CHAS. F. EVANS,

108 South 12th Street,

## PHILADELPHIA.

---

P. S.—During Convention I will be quartered at Room 357 Grand Pacific Hotel.



## A Very Wicked Fight.

For War Stories apply to B. P. Critchell; he can put more blood and thunder—real GORE to the square inch into his narratives than any two men we ever heard.

"Our regiment did a good deal of fighting during the war," says B. P. Critchell in the Cincinnati *Times-Star*. "About the hottest fight we ever got into was on Mission Ridge. We were close enough to the Rebs to shake hands with them, and they fought like fiends incarnate. We were too close to each other to reload our guns, and the boys were using their weapons for clubs. There was a tall, raw-boned Johnny gunner, who was fighting like the very devil himself. He was laying about him with a heavy gun swab, and he seemed to me to be the biggest man I ever laid eyes on. A half-dozen of our boys went at him, but he stood his ground. A heavy revolver, all the cartridges discharged, was thrown at him. It struck him full in the face with force sufficient to knock out a bull, but he only shook his head and went to work again. I threw up my Sergeant-Major's sword and cracked away at the swab, and I'd almost be willing to bet the pieces of my blade are flying around there yet. It shattered it clear to the hilt. The big Reb wouldn't yield an inch, and finally one of our boys, a Cincinnati named Boyd, who died here a few years ago, caught him off his guard and rammed a bayonet clean through him with such force that the barrel, too, passed out of the other side of the big fellow's body. Well sir, that man, mortally wounded, didn't give up, and as he lay there on the bloody turf, with his entrails hanging from a awful hole in his stomach, he grabbed a pistol and winged another boy in blue before he died. That was about the wickedest fight I ever got into."

M. P. DULTY, of Zanesville, O., is probably the oldest florist in the United States, being 96 years old. Michael served in the Revolutionary war.

## FERNS ~~~~~

## PALMS

## ROSES

## ~~~~~ BULBS.

We make a specialty of the above, and can offer them at all seasons in large quantities.

## HENRY A. DREER,

714 Chestnut St.,

PHILADELPHIA.

Our Mr. Jacob D. Elsle will be at the Convention, and will be pleased to give any desired information.

## Make A Note of it!

That you watch my advertisement in regular issues.

I aim to give satisfaction in every particular; quality, price and promptness.

ALBERT M. HERR,

FLORIST,

L. B. 338. LANCASTER, PA.

## BULBS. PLANTS. SEEDS.

## C. H. JOOSTEN, IMPORTER,

3 COENTIES SLIP, NEW YORK,

OFFERS

DUTCH BULBS, Hyacinths, Tulips, Narcissus, Etc., Etc.

ROMAN HYACINTHS, Paper White Narcissus

Lilium Harrisii, Candidum, Freesia, Etc

ALSO

From THE BOSKOOP, HOLLAND, NURSERY ASSOCIATION  
for Fall or Spring delivery,

100,000 HARDY, BUDDED, 2 YEARS, STRONG,

50,000 EXTRA STRONG CLEMATIS, LILACS,

HYDRANGEAS,

AZALEA GHENT,

FORSYTHIAS,

SNOWBALLS,

CITYSUS,

HERBACEOUS PÆONIES, ETC., ETC.

RHODODENDRONS,

AZALEA MOLLIS,

HIBISCUS,

WIEGELIAS,

DEUTZIAS,

10,000 AZALEAS INDICA.

5,000 CAMELLIAS, in assortments of leading varieties.

Send Catalogues on application.

## HAMMOND'S SLUG SHOT.

REGISTERED.

Used for eight years with safety to man and beast—In the garden, field, orchard and greenhouse. An insecticide for general purposes, of approved effectiveness.

EBEN S. REXFORD, the well-known writer on floriculture, says, under date of June 26:

"I have spoken favorably of your Slug Shot as an insecticide of value on roses, for I find it quite as effective on the rose bugs and aphides as anything needs to be."

And so say a good many others. SOLD BY THE SEEDSMEN OF AMERICA,  
WORKS, PHILADELPHIA, N. Y.

## CORSAGE AND BUTTONHOLE BOUQUET HOLDER.

"The PERFECTION"

R. F. LAWRENCE,

PATENTER

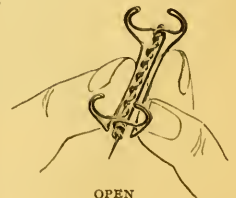
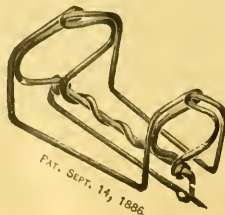
And Manufacturer,

136 Pearl Street,

BUFFALO, N. Y.

Send for Prices.

OPEN



# THOMAS S. WARE,

HALE FARM NURSERIES,

TOTTENHAM, LONDON, ENGLAND.

## SPECIALTIES:

Hardy and Forcing Bulbs, Narcissus, Lilies, Gladiolus, Chionodoxia, &c. Dahlias, the largest stock in Europe; Carnations, Forcing Pinks, Chrysanthemums, Pyrethrums, Pæonias, Gooseberries, Moss Roses, Hardy Herbaceous Plants, &c., &c.

Narcissus Obvilleris; the finest Trumpet forcing Narcissus, selected bulbs . . . 1008	Cactus Dahlia "A. W. Tait," pure white flowers, very fine . . . per doz. @ 12s	Delphiniums, in first-class variety. Per hundred . . . @ 60s and 80s
Narcissus pseudo-scutellus (the garland daffodil), a true, early forcing variety . . . 258	Pompone Dahlias in variety, my selection per hundred, 40s . . . per doz. 6s	Delphinium Belladonna . . . per hundred @ 40s
Chionodoxia Lucilliana, fine roots . . . 258	Show and Fancy Dahlias in variety, my selection . . . per hundred, 40s; per doz. 6s	Double Herbaceous Pæonies, in fine varieties . . . per hundred, 100 and 120s
Freesia refracta alba . . . 908	Single Dahlias in variety, my selection, per hundred, 40s . . . per doz. 6s	Single Herbaceous Pæonias, in fine varieties . . . per hundred @ 100 and 120s
Freesia Leichtlinii Major . . . 908	Perpetual Carnations in many fine varieties . . . per hundred, 100s and 130s	Pæonia officinalis rubra plena, the old red pæony . . . per hundred @ 40s and 60s
Lilium Chalecedonicum, the true scarlet Martagon lily . . . per 100, @ 80s	Carnation "Gloire de Nancy," fine pure white, clove-scented flowers . . . per hun. @ 40s	Pæony tenuifolia plena, pretty deeply divided foliage, double crimson scarlet flowers per dozen . . . 12s, 18s and 24s
Lilium Martagon Album, the white Martagon lily . . . per doz. @ 30s	Old Crimson Clove . . . per hun. @ 20s	Pæony Whitelei, fine double white flowers per dozen . . . 12s and 18s
Lilium Pomponium, one of the earliest bright scarlet flowers . . . per 100, @ 40s	Single Pyrethrums, in fine varieties. Per hundred . . . @ 30s and 40s	Tree Pæonies, a splendid collection of all the best named sorts . . . per doz. 30s and 36s
Lilium Browni, one of the finest trumpets, 10 inches long, inside pure white, outside purple . . . per doz. 24s, 30s and 36s	Double Pyrethrums, in fine varieties. Per hundred . . . @ 30s and 40s	Extra fine . . . 48s
Lilium Giganteum, per doz. 24s to 60s; extra large roots . . . each, 7s 6p and 10s 6p	Phloxes, in fine varieties . . . per hundred @ 30s	Old Red Moss Rose, forcing stuff, per hundred, 25s . . . per thousand, £10 10s
New Cactus Dahlia "William Pearce," deep yellow flowers, very free . . . per doz. @ 12s	Florists' Pinks, in fine varieties, per hun. @ 30s	Gooseberry "Industry," two years, per hundred, 15s, per thousand, 140s; Strong, three years . . . per hundred, 25s
New Cactus Dahlia "Mrs. Hawkins," rich sulphur shading to white . . . per doz. @ 12s	New Chrysanthemum "Mrs. H. J. Jones," yellow sport from Ethel, very late, per doz. 12s	Gaillardias, several fine new vars. . per hun. 60s
Cactus Dahlia "Cochineal," rich velvety colored flowers . . . per doz. @ 9s	New Chrysanthemum "Golden Gem," Japanese form, deep chrome yellow flowers per doz . . . @ 18s	

Full descriptive catalogue may be had upon application.

JAS. M. THORBURN & Co.,

15 JOHN STREET, NEW YORK,

Offer to FLORISTS and WHOLESALE DEALERS, for Summer and Autumn delivery,

FIRST-CLASS GOODS ONLY, OF Dutch Bulbs, Roman Hyacinths, Lilium Harrisii, Candidum, Longiflorum and Auratum.

LILY OF THE VALLEY PIPS, FREESIA REFRACTA ALBA. Superior ROSEAE FIBRE for tying, at low figures by the bale. TRADE PRICE LIST ON APPLICATION.

Freesia Refracta Alba,

Finest Quality

AND

True Variety.

Per hundred, \$3.25; per thousand, \$30.00; per ten thousand, \$290.00.

H. WATERER,

IMPORTER OF

PLANTS, AND BULBS,

56 NORTH 38TH STREET,

PHILADELPHIA.

FREE TO ALL!

OUR ILLUSTRATED CATALOGUE OF

Plants, Seeds, Bulbs, Shrubs, etc.,

Free to all applicants. Wholesale price list of BULBS, &c., READY.

Fine stock of ROSEARIDIAS for winter blooming on hand. Address,

NANZ & NEUNER, Louisville, Ky.

NEARLY EVERY FLORIST IN THE COUNTRY

Regularly Receives our WHOLESALE PRICE LIST of

## PLANTS, BULBS AND SEEDS.

Should you fail to get it, please drop us a postal, when it will be regularly sent.

## PETER HENDERSON & Co.,

35 and 37 Cortlandt Street, NEW YORK.

Established 1864.

## ASPARAGUS ROOTS.

We have to offer 400,000 two year old CONOVER'S COLOSSAL ASPARAGUS, strong, vigorous roots and are now prepared to take orders for delivery in Fall '87 or Spring of '88.

Also now growing, choice varieties of Melon, Tomato, Cucumber, Corn and Cabbage Seed.

## WILLIAM R. BISHOP,

SEEDSMAN,

Burlington, N. J.



## Chicago Parks.

The remarkably long and very severe drought has burned the lawn and even trees in all of the parks to such an extent that much of their beauty is destroyed. The fancy bedding has, however, been kept in fair condition under the circumstances, and no visitor should fail to visit at least one of the parks.

Lincoln park is the most accessible. Take any car bearing the name "Lincoln Park" on Clark street. Cars start north from corner of Washington street in front of the county court house. A ride of twenty-five minutes will bring you to the park entrance at Center street, and the main bedding and greenhouses will be found a few minutes walk northeast.

South park lies at a greater distance from the center of the city, but the beautiful bedding to be seen there will well repay a little extra ride to reach it. To reach the park take a Cottage Grove avenue car on State street, north of Madison street, or on Wabash avenue, south of Madison street. This will carry you to Thirty-ninth street where a seat in a park phaeton can be secured for 25 cents. The phaetons make the rounds of the South park system of boulevards and parks, bringing passengers back to the starting point. Or a walk from Thirty-ninth street to Forty-sixth street will bring you to "the mound" on Drexel boulevard, one of the attractions of the park system. Another walk to Fifty-first street brings you to the main bedding which is located at the entrance to the park proper. This park may also be reached by Illinois Central train to Fifty-first street, the station lying eight blocks from the entrance to the park. Trains run every 15 minutes.

Douglas park can be reached by Ogden avenue cars on Madison street; Garfield park by Madison street cars bearing sign "Garfield Park," and Humboldt park by Milwaukee avenue cars on Lake street bearing sign "Humboldt Park."

By consulting our map you can readily locate any of the starting points mentioned.



ALL SIZES OF SINGLE AND DOUBLE THICK

## GLASS FOR GREENHOUSES.

ALL GLAZIERS' SUPPLIES.

Write for Latest Prices.



## Florist's Letters

Patent applied for. These letters are made of the best immortelles, wired on wood or metal frames with holes to insert toothpicks.

Prices on Wood Frames;  
2-in. Purple... Per 100 \$3.00  
Less than 100, 3c.  
2½-in. Purple. Per 100 \$4.00  
Send for sample. Postage 10c. per 100. Script lettering on Metal Frames any word, 8c. per letter.

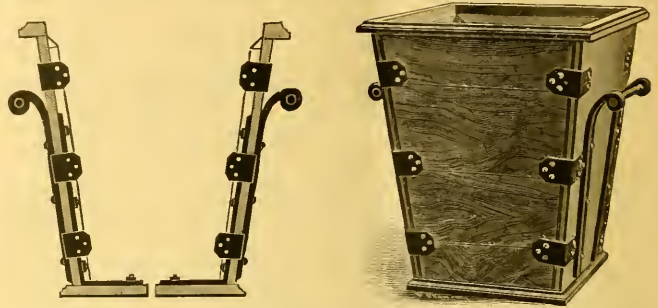
Designs, Monograms, etc.

W. C. KRICK,  
1107 Broadway, Brooklyn,  
N. Y.

J. C. VAUGHAN, Chicago,  
Agt. west of Pennsylvania.

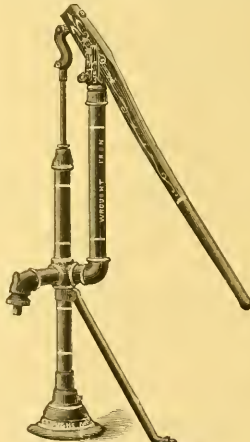
A full line of Samples can be seen at the Convention.

## RED CEDAR BOXES.



THESE BOXES ARE HANDSOME AND TAKE WHEREVER SEEN.

These are well made, more durable than any other. Red Cedar will last three times as long as pine. They are varnished, and look much finer than a painted box. We recommend to you the box as shown in the above illustration. The four corners are well braced with iron, each brace containing six screws, and twelve braces to each box. The greatest improvement, however, is the handles; they are made of wrought-iron, and are so wide that you have plenty room for both hands, and when you lift on it it does not come up without the box, and send you rolling the lawn. The iron runs down the sides of the box to the bottom, and is fastened with strong bolts, which run through into another iron which runs down inside, parallel with the one outside, and runs across the bottom. No box can look better or be more durable than these, and the price is very low. If you have century plants, oleanders, palms, or any large plants that require moving spring and fall, you can not afford to be without the box. We make special sizes to order.



FORCE & SUCTION COMBINED.



GOLDMAN'S ATOMIZER.  
\$2.50 Per Dozen.

We have a surplus of Variegated Stevia, Double White Primroses and English Ivies, in fine condition, will sell cheap to the trade. Write for particulars.

## THE CLOUGH PATENT WROUGHT IRON PUMP.

The best Pump we know of for Greenhouse purposes.

## A SAMPLE OF OUR TESTIMONIALS:

SAGINAW CITY, MICH., April 25, 1887.

FRANK WHITNALL & Co.—Your pump is all that can be asked for, or in better words, the best force pump I have ever used. Respectfully yours, WILLIAM ROTHKE.



The above cut represents a device for pressing tooth picks so that they can be cut any desired length by a common handsaw. It can be easily fastened, when wanted, to a counter, table or similar fixture of convenient height, by a thumb-screw at the back. The box of toothpicks is placed under the arch as shown in the cut. The handles of the two (2) excutrices are then brought down till they meet, thus drawing the arch down over the toothpicks and pressing them firmly. The arch, being double, admits of the passage of a saw; a flange in the top of the arch acts as a saw guide and protects the edge of the saw from the iron arch, while a piece of hardwood inlaid in the bed of the press prevents the teeth from striking the iron at the bottom. A good sized boy can saw up with this press from 30 to 40 boxes an hour. All iron and neatly japanned. PRICE, \$2.50.

For prices or further information, apply to

## FRANK WHITNALL &amp; Co.,

428 MILWAUKEE ST., MILWAUKEE, WIS.

# THE AMERICAN FLORIST



*America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."*

Vol. III.

CHICAGO AND NEW YORK, SEPTEMBER 1, 1887.

No. 50.

## THE AMERICAN FLORIST

Copyright, 1887, by American Florist Company.

Entered as Second-class Mail matter.

Published on the 1st and 15th of each month by

THE AMERICAN FLORIST COMPANY.

GENERAL OFFICES, 54 La Salle Street, Chicago.

EASTERN OFFICE,

Room 8, Vanderbilt Building, New York.

All communications should be addressed to the general office at Chicago.

SOCIETY OF AMERICAN FLORISTS.—E. G. Hill, Richmond, Ind., president; John N. May, Summit, N. J., vice-president; M. A. Hunt, Terre Haute, Ind., treasurer; Wm. J. Stewart, 67 Bromfield street, Boston, Mass., secretary. The fourth annual meeting at New York, Aug. 17, 18, 19, 1888.

UNFORTUNATELY we did not have the convention photographed.

MR. LOUIS SIEBRECHT of Queens, N. Y., says he has \$100 for the man who will produce a cure for the violet disease. Who takes the hundred?

THE LADIES' reception committee certainly did well. All the visiting ladies expressed themselves as more than pleased at the way they were entertained.

ALL ARE inclined to indorse President Hill's view that the committee on fraudulent substitution should "stay with the bear," and Robt. Craig says they will make it very interesting for the bear too.

AMONG the missing: Harry Sunderbruch, R. J. Hallday, Alex. Murdock, F. R. Pierson, Frank Huntsman, Jos. Tailby, R. S. Brown and Ed. Horan, were inquired for and their absence much regretted.

SECRETARY J. G. ESLER of the Hail Insurance association received applications during his Chicago trip amounting to over \$600,000. Write him at Saddle River, N. J., stating amount of glass you have, and he will tell you the cost to go in.

THIS CONVENTION seems to have exceeded all others in its very general attendance from all parts of the country, though the local membership was not much over one-half as large as at Philadelphia, and the total received to the closing day was about 25 less than on the same day at Philadelphia.

THE IOWA FLORISTS met at the Grand Pacific hotel during the convention and organized a state society. Hon. C. C. Cole was elected president, J. T. Temple secretary, and Messrs. Cole, Blair and Kramer were appointed committee on by-laws. The meeting was then adjourned to meet in Des Moines September 7 at 10 A. M., during the state fair. All Iowa florists are requested to be present at that time.

### The Third Annual Meeting.

While this convention in point of numbers hardly realized what was hoped for it, as a whole it may be set down as the most successful one yet held.

The attendance at the regular sessions was decidedly larger and more uniform than ever before, showing that those present, who had braved the dangers by rail, the fear of terrible heat and all the other ills that summer time is heir to, did so because they came to attend to the business of the convention, and for nothing else. With the exception of some essays not read according to programme, the work done was all that could be expected.

There is room in several ways for improvement in the conduct of the meetings, and in a column elsewhere the FLORIST hopes to compile some valuable hints in the next two or three issues.

### WHERE WAS A. Blanc?

WHERE were the Washington, D. C., and Kansas City delegations?

THE convention certainly aids to develop a friendly spirit in the local clubs.

MR. DAN FARSON left for home the 24th, having taken in the west as far as Cedar Rapids, Ia.

LORD & THOMAS, the advertising agents, rendered liberal financial aid to the local committee.

A NUMBER of delegates visited Forest Glen, Geo. Miller's and Chas. Reissig's greenhouses, on Friday and Saturday.

THE officers elected for the ensuing term are E. G. Hill, president; John N. May, vice-president; W. J. Stewart, secretary, and M. A. Hunt, treasurer.

MR. JOHN S. FORSTER of Evanston should have credit for showing some fine plants and being almost the only local grower who had the enterprise to do it.

MISS E. L. TAPLIN of New York, D. B. Long of Buffalo, and T. B. Jenkins of Rochester among other press representatives visited the FLORIST'S office during the convention.

MR. ASMUS' collection to replace Mr. Thorpe's damaged hat netted \$4.17 and one of Vaughan's medals, with several eastern members to hear from. Mr. Thorpe's vigorous protests availed him nothing.

THOSE WHO have been unable to attend should remit their dues by mail to Secretary W. J. Stewart, 67 Bromfield street, Boston, or to the vice-president for their state, at once, to have their names included in the printed membership list.

### Convention Suggestions.

Many thoughts and suggestions doubtless occurred to our readers during the convention to which no time could be given. We desire short items of this nature for this column for the next two issues.—Ed.

Vice-president May suggests a large auction sale of plants be held during the meeting. It should attract a large attendance, and if arranged for in season, aid the transfer of much desirable stock.

It is believed the Chicago club could have netted quite a sum had they made an exhibition of floral work and charged the general public an admission fee during the convention.

An assistant secretary will be a necessity at the New York meeting. For signing certificates and receiving dues; the society must keep some representative at the secretary's desk during all hours of the day and evening.

MR. R. J. MENDENHALL of Minneapolis gave the convention a very hearty invitation to visit that city next year. Why not visit the famous twin cities in 1889? There is no lack of public spirit in the northwest.

### Complete List of Exhibits at the Convention.

Chas. Reissig, Chicago, cut orchid blooms.

Jno. A. Scollay, Brooklyn, N. Y., putty bulb and rubber sprinkler.

F. E. McAllister, New York, bulbs, immortelles and cypas leaves.

O. Gorke, Douglas Park, Chicago, flower and fruit of Philodendron pertusum and blooms of Justicia coccinea.

Chas. S. Price, Lansdowne, Pa., iron frame for slate benches.

Marschuetz & Bacharach, Philadelphia, baskets and florists' supplies.

Koehler & Bro., Philadelphia, a large exhibit of white doves.

Falls City Wire Works, Louisville, Ky., florists' wire designs.

Eclipse Mfg. Co., Chicago, wrought welded hot water boilers.

J. D. Carmody, Evansville, Ind., sectional hot water heater.

H. W. Williams & Sons, Batavia, Ill., glazing tool, putty bulbs, mailing boxes, plant labels.

Nee Ban, Chicago, fancy vases and flower pots.

Stecher Lithographic Co., Rochester, N. Y., colored lithographs of flowers and fruits.

Devine's Boiler Works, Chicago, hot water boiler.

J. M. Gasser, Cleveland, O., metal glazing joint, electric temperature alarm.

Frank Whitnall & Co., Milwaukee, force pump, cedar plant boxes.

Thos. W. Weathered, New York, hot water boiler.





FIRST REGIMENT ARMORY CHICAGO, WHERE THE CONVENTION WAS HELD

contemporary; he will generally be found forging ahead towards prominence in his vocation, while his uneducated fellow-worker plods along through the ruts and quagmires of a hand-to-mouth life.

But, considered in connection with horticulture, I consider a first class education as simply indispensable; horticulture as a vocation does not enjoy the distinction it deserves, the men engaged in it receive at best but indifferent compensation for their labor, and it is only in isolated cases that they attain in the social position occupied by members of many other professions; in order, therefore, that horticulture may be elevated to its proper dignity as a profession, to render it more lucrative to its members, and improve their social standing, I believe a higher standard of education to be eminently essential.

The social recognition an individual receives is regulated largely by his mental attainments; and the esteem in which any vocation is held is gauged by the character and intelligence of those engaged in it. Law or medicine are no more honorable as professions, than horticulture, yet they are generally regarded as much more respectable, and this fact is really but a just and proper tribute to the general intelligence of those engaged in the practice of those professions; for a certain educational standard is absolutely necessary before entering on the study of law, medicine and many other professions, while the young florist begins his career with a very limited education, and is thus, at the very outset, lacking in the most essential element requisite for the proper study of his profession, and the ability to intelligently convey his ideas to others.

"A Hired Gardener" (p. 510), suggests "reading the AMERICAN FLORIST" as a remedy for our mental deficiency, but the FLORIST cannot properly perform its mission unless its columns are liberally supplied with a free exchange of opinion and experience between those engaged in gardening pursuits, the writer is painfully sensible of that lack of "confidence in our ability to properly express our ideas on paper," and could recount many a horrible vision of the editorial waste basket, but this lack of confidence rarely exists when the faculties have been trained by a careful education, and one very desirable result of a more liberal system of education for gardeners, would undoubtedly be an increase in the quality and quantity of horticultural literature.

The men who have become prominent in horticulture, fitly illustrate the advantages of mental culture, amongst the men referred to by "A Hired Gardener" are several whom the writer has had the fortune to know personally. Mr. Miller under whom I had the pleasure of serving for years, possesses a high order of mental culture, and I can recall many a profitable hour spent in the society of Prof. Meehan, but while we point with pride to such examples of intelligence, we are confronted with the fact that the silence conspicuous at our meetings, and the scarcity of horticultural writers, indicates such intellectual capacity to be the exception and not the rule. Brought as the florist constantly is, into business intercourse with the best classes of society, it must be clear to every thinking mind that he should be perfect master, not alone of his business, but also of that ease of manner, refinement and intelligence, the result of a liberal education; perhaps I should properly have said before, that by education I do not mean

M. M. Bayersdorfer & Co., Philadelphia, baskets and florists' supplies—a very large and complete exhibit.

B. B. Chandler, Hyde Park, Mass., barbed glazier points.

J. H. Ives, Danbury, Conn., putty machine.

Wm. Dilger, Sandusky, O., material for rock work.

James King, Chicago, bulbs, florists' supplies.

J. A. Penman, New York, copies of "The Illustrated Dictionary of Gardening and Encyclopedia of Horticulture."

Caparu & Son, Milburn, N. J., landscape architects' designs.

Beatty & Co., New York, colored lithographs of flowers and catalogue covers.

W. C. Krick, Brooklyn, N. Y., immortal letters and inscriptions.

E. Hippard, Youngstown, O., bulbs, sash lifter and steam call bell.

C. Hennecke & Co., Chicago, statuary, flower pots, vases and stands, aquariums, etc.—a large and interesting exhibit.

Erl. Jansen, New York, novelties in florists' baskets. This exhibit commanded much worthy of notice; the new brass jardinières and nickel-capped bamboo stands were especially attractive.

S. C. Moon, Morrisville, Pa., cut gladioli.

Michel Plant and Seed Co., St. Louis, new single tuberose.

John S. Forster, Evanston, Ill., seedling abutilons.

Siebrecht & Watley, New York, cut orchids.

John Lane, Chicago, cut blooms and plants of asters. The flowers shown were most excellent.

James Vick, Rochester, N. Y., a very large exhibit of cut gladioli.

J. Horace McFarland, Harrisburg, Pa., specimens of printing for florists.

Lockland Lumber Co., Lockland, O., cypress sash bars.

Philadelphia Immortelle Design Co., Philadelphia. A large exhibit of designs of immortelles and dried flowers and wheat sheaves.

J. C. Vaughan, Chicago, bulbs, florists' supplies, tools and holly.

Taylor & Schofield, New Brighton, Pa., flower pots.

W. I. Dickerman, New Haven, Conn., armored hose.

C. A. Kuehn, St. Louis, wire floral design, and large design, "Rock of Ages," made of immortelles and dried flowers.

Rose Mfg. Co., New York, tobacco insecticide soap.

R. F. Lawrence, Buffalo, N. Y., bouquet holders for dress wear.

Z. K. Jewett, Sparta, Wis., lycopodium, sphagnum and holly.

H. A. Dreer, Philadelphia, petunia and gloxinia blooms. The gloxinias were beautifully marked.

Quaker City Machine Works, Richmond, Ind., ventilating apparatus.

#### The Education of Florists.

Your correspondent A. E. W. (p. 485), very ably introduces a subject which I regard as of vital importance, and although those who preside over the destinies of the AMERICAN FLORIST may not regard its columns as quite a proper medium for discussing the matter, I am constrained to say a few words in favor of a higher standard of education for the florist.

A thoroughly sound education is an easy load to carry, and must ever prove advantageous to its possessor, however humble his walk in life may be; for it undoubtedly opens up to him avenues for social and business advancement, that are virtually closed to his less intelligent



*E. G. Hill.*

E. G. Hill.

merely a sound knowledge of his profession in all its branches, this is naturally understood; I am advocating now, a thorough school education, acquired previous to entering on his professional studies.

The very nature of horticulture has a refining influence upon those engaged in it, and when we find a man possessing the refinement thus acquired, in conjunction with the culture imparted by education, we have a man who is bound to make his mark in a business sense, impressing all who come in contact with him by that undefinable something that commands respect, and the very beau ideal of an interesting acquaintance.

But alas, not a few of us have passed so many mile stones in our life journey that we can hope to see little improvement in our own day, but we can exert every available effort to ensure a better condition of things for the coming florist; and while possibly few will coincide with me, I must express in conclusion, the conviction I have always held, and still hold, that the condition of those engaged in horticultural pursuits, will never be materially improved, financially or socially, until such time as a fixed standard of education is absolutely compulsory with young men desiring to enter the ranks of horticulture.

Baltimore, Md. A. W. M.

ROBT. CRAIG says: Wet and low temperature aggravates the black spot. We keep dry, raise the temperature and use a carbolic wash.

It is with great pleasure that we present on this page a portrait of Mr. E. G. Hill, who has been elected president of the Society of American Florists for the ensuing term.

Mr. Hill was one of the few determined and persevering men who laid the foundation of our now strong and prosperous society, and ever since its foundation no call upon his time and attention has been ignored when the best interests of the society demanded it. As secretary of the society for two successive terms, he bore by far the largest burden of work and worry which is inseparable from a conscientious execution of the duties of that office. No detail was too small for his careful attention; no inquiry from a correspondent too insignificant to receive a courteous reply; and the result has been the creation of a host of new friends, which, added to his previously large acquaintance, has made "Gurney" Hill—as he is familiarly known to his intimate friends—one of the most popular men in the trade, not only in the west, but in the east as well. And we are pleased to record that this pleasant and whole-souled gentleman's labors have been rewarded by the highest honor the Society of American Florists can confer.

Mr. Hill's father was a florist before him, having a place in Rochedale, Lancashire, England, where the subject of this sketch was born, Sept. 11, 1847. He is consequently now 40 years of age. Though of English birth, nearly all his

life has been passed in the United States, his parents moving to this country when he was but 3 years old, locating at Geneva, N. Y. Here he remained until he was 19, receiving such limited education as the public schools afforded, and learning his trade in the greenhouses of Maxwell Bros.' nursery, where his father was foreman.

At the age of 19 he removed to Richmond, Ind., and was foreman of the Cascade nurseries of that city for thirteen years. He started into business for himself at Richmond in March, 1882, with but limited capital, commencing with two small greenhouses, to which additions have been continually made until the place now contains some 25,000 feet of glass. Roses have always been Mr. Hill's strong hold, and much space is devoted to them, a large number being required to supply his large mail orders, and of late years his wholesale trade in both novelties and staple stock has been very large.

We believe that no better man could have been selected to conscientiously administer the affairs of the national society than Mr. Hill, as he possesses that breadth of mind and command of detail so necessary in such a position, and is withal one of nature's gentlemen.

In his acceptance of the office Mr. Hill said:

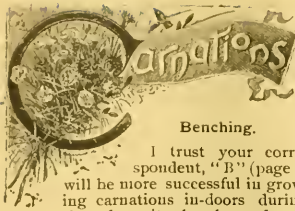
"MR. PRESIDENT, LADIES AND GENTLEMEN:—Surely you have honored me beyond anything I could have hoped or desired, for I take it to be a great honor to be thus selected as president of this association.

"I fear, however, you have made a mistake in your choice as between myself and my honored friend, the gentleman from St. Louis, for I know of no one in our whole number who is better qualified to fill creditably this important position. As a parliamentarian he has no equal, and we all admire him for his genial and pleasant address; but the thought of what might have been, and would have been, had you thus chosen, shall stimulate me in the discharge of the duties intrusted to my keeping. Then again I am reminded of the fact that I am to follow in the footsteps of our old friend and first president, Mr. John Thorpe, who, as you all know, is one of the best informed plantmen in the country. We all love him for his sterling worth, his large-heartedness and kingly nature. Then again I am to be the successor of the present incumbent, who has so ably filled this chair. Ever since I have known Philadelphia there have been an innumerable lot of Roberts. In the olden time there were Robert Scott, Robert Buist, and Robert this and that, and at the present time they have their Robert Kirt, Robert Ferguson, Robert Dennison and other Roberts; but with all respect to the Roberts named, I want to say that the grandest Robert of them all is the honored president of this society.

"Accept my most heartfelt thanks for your kindness. With a high appreciation of the honor conferred, let me assure you that the interests of this association shall command my best thought and most careful attention. Again I thank you."

BARRELS cut lengthwise into two pieces painted red and raised on white stands three feet high, and well filled with plants, ornament many of the depot grounds of the shore division of the N. Y. N. H. & H. R. R. through Connecticut.





### Benching.

I trust your correspondent, "B" (page 7) will be more successful in growing carnations in-doors during summer than the writer has been, for although I cannot say that the experiment in my case was quite a failure, I am satisfied the results were not the best.

Some three years ago I planted one side of a span-roof house with young plants, chiefly Crimson King and Edwardsii. They were good, thrifty stock from 4-inch pots. Each alternate sash was taken off the house, and the plants had all necessary attention as to pinching, watering, etc. The result was a light crop of bloom early in the season—too early to be of much value—and no more bloom worth mentioning till very late in the spring. This last was a good crop and good flowers, but did not repay me for the time and roots occupied in obtaining it.

I was so ill pleased with results as a whole that I never tried the experiment again, neither have I known it tried by others, and I am consequently the more anxious to learn what measure of success "B." is destined to achieve. A. W. M. Baltimore, Aug. 20, '87.

**BENCHING CARNATIONS.**—In reply to B., of Richmond, Ind., would state that Messrs. D. Rohrer & Bro. of this place (extensive cut flower growers) have been planting their carnations in the beds in houses several years, with very satisfactory results. But they have their houses built so that they can take the glass off of them, so that their plants are really outside; and they prefer solid beds to benches, but use both. A house of Huize's White planted last summer with the glass on produced a very heavy crop of blooms all through the winter and a moderate number as late as July 15 of this summer. But to propagate from stock grown continually under glass would certainly cause deterioration. I trust B. will give results, as there is quite a saving of labor and expense in this method. ALBERT M. HERR.

Lancaster, Pa.

### Forcing Bulbs.

All bulbs needed for winter blooming should be planted as soon as received. When this is done they can be placed outside, covered by some material—soil or sand are as good as any—and if possible sheltered from heavy rains and snows. Upon the approach of frost they can be covered by litter or manure. Let each variety be labeled and the label placed so that it can be readily seen. If this method is adopted the bulbs can be brought into the greenhouses at any time through the winter.

Before forcing any of these bulbs a list should be made of them all and the number of each kind stated. Then divide into different batches and decide as to the number required and the time for each to be brought into the greenhouses. The requirements of past years should guide as to the days when there is the most demand. By following this system

growers dependent upon a local market or upon a limited number of retail sales may so arrange for the flowering of their bulbs that all waste is avoided.

It is well also to remember that all the bulbs that are forced for winter blooming will flower equally as well in flats as in pots, and that a minimum amount of light and sun is all that is requisite. Keeping this in mind, a considerable saving of labor and money may be gained. The main point in the production of fine flowers is to buy only the best bulbs. Cheap and inferior specimens can never supply the choicest bloom. No class of plants is easier to cultivate than these Holland bulbs. The work is already done for us; all that we have to do is to supply soil and water, and a harvest of flowers may confidently be expected.

Besides hyacinths, tulips and narcissus (which every one grows), try a few

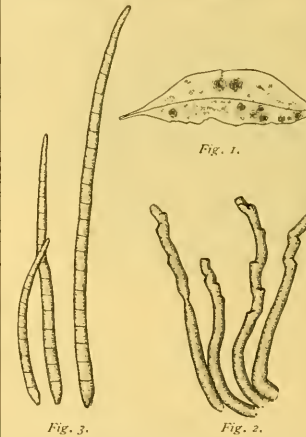


FIG. 1.—Diseased mignonette leaf, natural size.  
FIG. 2.—Cluster of spore-bearing threads magnified 500 times.  
FIG. 3.—Spores, magnified 500 times.

sparaxis and ixiis. Brought into flower for Easter, they sell readily and amply repay any little outlay. They are of easy cultivation, and the same general rules given for other bulbs will also apply to them.

Now is the time to plant freesias. Benches are recommended instead of pots, but flats are preferable to either. When through blooming the bulbs can remain in the latter until wanted for the following year. The flats can also be transferred readily at any period to any desired location. Use rich soil, not lean, and not more than three inches in depth. Keep somewhat cool until the foliage develops. Plant close, for each individual plant requires but little room. Do not have all the bulbs flowering at the same time, but keep some back for succession.

Candidum and L. longiflorum can be potted and stood outside as soon as received. They need not be housed until late in the fall, for slight frosts will not injure them. They need not be placed upon the benches until poinsettias or bouvardias are through blooming.

A. E. WHITTLE.

BLOOMSBURG, PA.—J. L. Dillon is building a rose house 150 x 20.

### A Disease of the Mignonette.

A fungus disease of the mignonette is quite prevalent and destructive in gardens at Champaign, Ill. It forms discolored and wilted spots on the leaf, and sometimes the whole leaf is wilted by it. The spots are round at first, but become confluent or indefinite. It spreads rapidly from plant to plant. Several times nearly all the diseased plants were removed from the bed, but the few diseased leaves overlooked infected the healthy ones that remained.

The spots appear granular under a lens or even to the naked eye, as shown in the figure. (Fig. 1.) Each granule is really a cluster of fungus fruiting threads (fig. 2), dark-colored threads more or less bent and knotted, especially near the top. At each nodule is borne a spore which falls off at maturity.

Figure 3 shows three spores of different sizes. They are lighter-colored than the threads which bear them, broadest at the base, tapering gradually to the top, and divided by cross partitions into many cells. While very destructive where it occurs, it has not yet become very prevalent in this country.

Possibly some method of spraying similar to those used in other cases may be useful in checking it, but mignonettes are so easily raised that it will probably be best to destroy diseased plants and plant no more in the same place for some time. A. B. SEYMOUR.

### Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1886.

Sept. 1—Tem., morning 55°, noon 70°, evening 65°. Wind SW. Potted trimmed rose cuttings. Pricked out in frame cuttings of *Hydrangea paniculata grandiflora* from propagating frame. Cleaned and trimmed beds. Commenced propagating coleus in frames.

2—Tem. 64, 75, 72. S. to SE. Placed in frames cuttings of rose geraniums and coleus. Potted from propagating frame cuttings of roses. Cleaned and trimmed beds and glazed houses.

3—Tem. 65, 82, 76. SE. to E. Put in propagating frame cuttings of achenanthes and alyssum.

4—Tem. 70, 84, 79. S. Transplanted for stock pileas and variegated alyssum.

5—Tem. 72, 86, 80. S. to SE. Sunday.

6—Tem. 75, 89, 80. S. to SE. Transplanted for stock, thymus, etc. Trimmed and cleaned beds. Again watering freely outside.

7—Tem. 73, 84, 83. S. Nipped freshly potted alternanthera in frame yard. Cleaned and trimmed beds.

8—Tem. 73, 75, 67. S. to NW. Cleaned and trimmed beds.

9—Tem. 72, 84, 78. SE. to SW. Repaired broken glass on greenhouses. Picked seeds of various plants and trimmed beds.

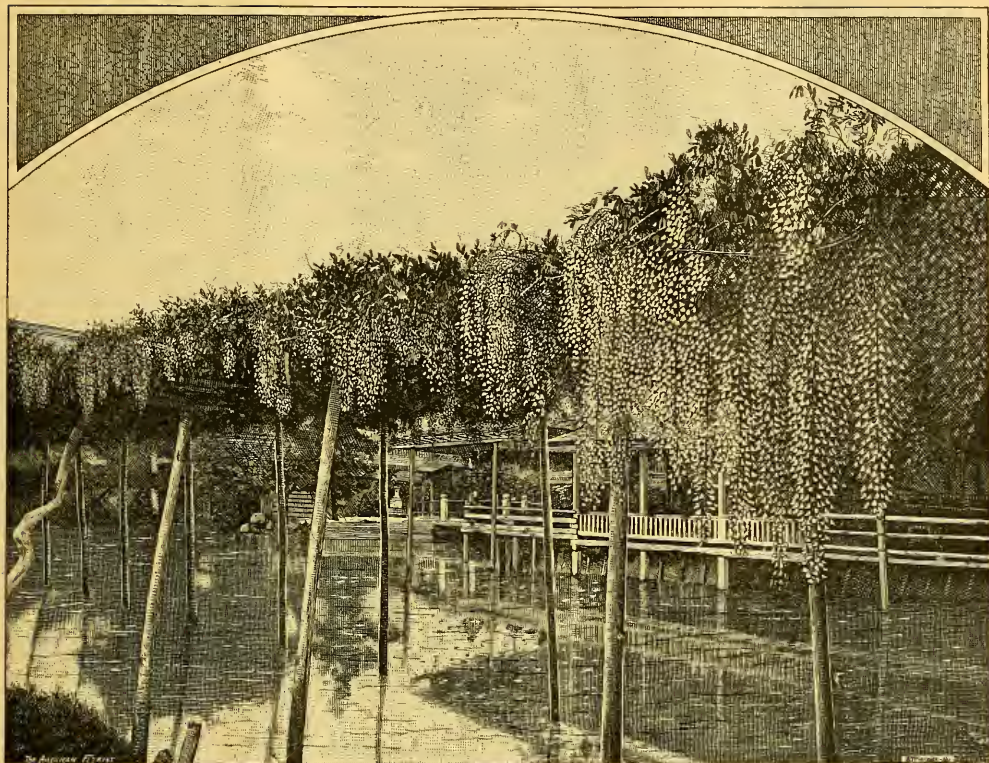
10—Tem. 72, 74, 67. W. to NW. Same as yesterday, and hauled sand from the lake shore for propagating beds.

11—Tem. 55, 75, 72. SW. Potted hyacinth bulbs; 100 Romans, 75 single red and rose, 75 single rose, 50 light blue, and 100 single white.

12—Tem. 54, 64, 58. NW. Sunday.

13—Tem. 52, 76, 62. SW. to NW. Sifted sand for propagating beds. Glazed houses and fixed pipes. Commenced potting rooted cuttings of coleus from propagating frame. Prepared house No. 3 for plants.

14—Tem. 57, 60, 60. W. to NE. Continued potting coleus as yesterday. Filled



GIANT WISTARIA NEAR TOKIO, JAPAN.

tank and part of benches in No. 2 with sand for propagating. Glazing and cleaning houses.

15—Tem. 62, 76, 70. S. Arranged plants in palm house. Took in rubber trees, etc., from outside. Potted coleus cuttings and glazing houses.

#### Japanese Horticulture.

Mr. H. H. Berger of San Francisco, who has recently returned from an extended trip through Japan, sends us several photographs of horticultural subjects gathered in that country. One photo is of the "Kin Kan Mikau," or orange, grown in pots for decorative purposes. Of this Mr. Berger says:

"This is one of the most suitable of the citrus family for pot culture. The habit is bushy, it blooms profusely, and as you can see by picture, the branches are literally covered with fruit. The latter has a very fine rind of an orange yellow, sweet and aromatic, and so thin that it is eaten together with the pulp, which is subacid like a lime, and very refreshing. In its native land—Japan—this fruit is eaten raw in quantity, and as they grow no limes it is used for that in all cooling drinks. The fruit is like a medium egg-plum in size, and is unsurpassed for preserves or crystallized in sugar. The tree is hardier than any or-

ange known except the Yudzu, which grows in the northern provinces. The kin kan can stand a temperature of 15° above zero Fahrenheit.

"The two smaller plants in pots represent a species which hitherto has been entirely overlooked, but which is sure to soon grow to be a favorite. It is an evergreen shrub which growing wild attains a height of four feet, of a globular form; the leaves are glossy, small, and those of one variety are somewhat thorny. The pure white blossoms of a tubular shape somewhat like *Daphne Geukera*; appear in spring at the same time the shrub is covered with its bright scarlet berries, making a most lovely contrast. It is very fine for pot culture, and for out-doors in a climate where cold is not more severe than 15° above zero."

Another photo is of a bamboo forest, "the stems being about forty feet high." Mr. Berger says:

"For ornamental foliage and graceful and striking effects the *Bambusa nana*, or dwarf bamboo, are unsurpassed and should be largely planted in the east; as a useful tree the giant varieties would find a grand home in the south."

Our illustration is engraved from the last photo, which shows a giant wistaria grown to an immense size near Tokio. This great plant, with its innumerable large clusters of blossoms must have been a handsome sight.

IN REPLY TO "A FLORIST."—Cow manure is usually used in making manure water in preference to horse manure. The "grubs of a dirty white, with brownish head, about a quarter of an inch long," which bore up into the stems of your primulas, are probably the same that caused much trouble to the writer in an old house about eight years ago. The grubs would work their way up through the drainage hole in the pot and eat the heart out of the stem. On examination it was found that they had burrowed runways all through the rotten boards which formed the bottom of the bench. They are probably a wood grub, and attack the plants only when the food in the wood is exhausted. Lime wash and kerosene were tried with beneficial results, but without securing total extinction of the pest. They finally disappeared, however, when the old house was torn down and rebuilt. If impracticable to put in a new bench, would advise clearing the bench and giving it a good soaking with kerosene, followed by a coat of lime wash.

DENYS ZIRNGIEBEL of Needham, Mass., is a very successful grower of asters and chrysanthemums for cut flowers. He uses largely the dwarf Chinese chrysanthemum, *La Neige*, for white flowers, and has a house 12 x 175 feet now planted with this variety.





### The Summer Propagation of Roses, with a List of Best Varieties.

BY E. G. HILL

*Read before the Chicago Meeting.*

The propagation of roses in the summer time is attended with more or less disappointment to the average florist and there may be a question as to its advisability; however for firms who carry on a large shipping business or mail trade it seems almost a necessity in order to have plants in suitable condition for transit in the early winter months, but it is a question in my own mind whether plants propagated in winter are not really preferable to those rooted in summer. I should much prefer a plant rooted in December which has been kept growing, to one rooted six months earlier but afterward allowed to eke out a miserable existence in a thumb pot.

Many western firms resort to the frame method of summer propagation and generally with good results, although the most expert will at times suffer defeat, and like the Irishman's flea, about the time you put your finger down, he will be elsewhere, so it sometimes happens with the finest crop of cuttings.

#### THE FRAME METHOD.

CONSTRUCTING THE FRAME. Take two twelve-inch boards for the back and an eighteen-inch one for the front, with the usual strips for supporting the sash; make the frames as nearly air tight as possible to prevent a too free ingress of hot air which soon injures the cuttings; many persons use strips of cloth or other packing on the edges of the frame so that the sash may have an even bearing thus making the frame quite air tight.

Ordinary six foot hot bed sash are used and the frame set to face the north, reversing the usual arrangement. About four feet above the frame make a light strip frame work for supporting a canvass shade; this height allows a man to work under it, or to move the sash, with some degree of ease. Light muslin is the best canvass for shading, attach a roller and it is easy to shade when necessary.

THE BED. Use from ten, to fifteen inches of fermenting material, the exact amount can best be determined by its condition and quality. We prefer the sweepings of horse stables, but we carefully reject any material that has been combined with chips or saw dust as this is sure to produce fungus. Pack the fermenting material firmly, and upon this place a coat of air-slacked lime, before putting on the sand; some times an inch and a half or two inches of fine cinders, cleanings from the tender box of a railroad locomotive is used immediately upon the manure to keep the sand from contact with it. The sand certainly remains sweet much longer when prevented from coming in direct contact with the fermenting material.

Use only the best and cleanest of sand; a depth of three inches is usual; tramp and pack this solid before inserting the cuttings and let the frame stand open from twenty to forty-eight hours before using, allowing the steam and intense

heat to pass off or there is danger of burning the cuttings.

VENTILATING. There is a difference of opinion as to airing, but after fifteen years practice we open our sashes from six to eight inches both morning and evening to allow change of air; fifteen to twenty minutes is long enough to leave them open.

WATERING. After the cuttings are inserted, water thoroughly and see that the sand is settled evenly and closely about them. Outside atmospheric conditions must determine the after waterings; we use the hand syringe once a day or oftener; on rainy days this may be omitted and the use of the watering can will seldom be found necessary after the first day, if the syringing is properly attended to.

NOTES. Fungoid growths are the ever present enemy to summer propagation and eternal vigilance is ever necessary. Go over the cuttings carefully every day or two and pick out any decayed stems or leaflets. As fungus usually makes its first appearance next to the boards, give these a thorough coat of lime wash every time the frame is used. If you can afford it, have the sides of the frame lined with galvanized iron.

CUTTINGS. Our wood for summer propagation is all grown under glass, and must be fine and healthy to insure success. Spidered wood or growth affected with mildew, should never be used for frame propagation, as they always bring trouble in the way of dropping leaves or blackening wood. We propagate all the different classes of roses in this way, but we find the mosses are the most difficult. Many of the nurseries of western New York succeed admirably with out-door grown wood of the hybrids and other classes, but this requires a large plantation from which to select suitable cuttings.

SHADING. As before stated, muslin placed on rollers affords the readiest method of giving shade and remember that this is of prime importance, all the light possible, for as many hours as possible, especially on cloudy days; it is an absolute necessity if the sand is to be kept pure and the cuttings healthy. The ever blooming classes will root in from eighteen to thirty days according to the condition of the wood. Hybrids, mosses and some climbing teas require a longer time, especially if the wood is of heavy growth or a little mature.

#### PROPAGATING ROSES IN THE GREENHOUSE IN SUMMER.

This requires still more care and greater watchfulness on the part of the florist than when performed in the same place during winter or early spring. A slate bottom, the almost entire absence of wood in any shape on a bed used for summer cuttings is best. An inch of clean sphagnum placed on the slate affords drainage; upon this place sand that is clean, pack, and water the cuttings the same as in the frame method. We have used light muslin tacked on the inside of the house for shade, but a better plan for midsummer is to use large sheets of brown paper placed immediately on the cuttings and keep this continually moistened by the free use of the watering can and syringe. Any neglect in the watering will result disastrously.

Another important matter is the proper selection of wood for the cuttings. Experience has shown that clean healthy wood taken when the flower bud is about to expand is the best material for use; this kept from wilting or drooping after being put in the sand will generally root, while cuttings taken just below this

growth, are often an uncertain quantity in the greenhouse in summer.

The requisites of success are, a clean greenhouse, where the air is absolutely pure and free from any decaying substances; clean sand; the free use of the watering can or syringe—and even when all these requirements are given, certain varieties still insist on yellowing and when once yellowed, or the leaves have dropped, we may say good bye to the cuttings. Hybrids and mosses are uncertain here, and most of them insist on a permanent leave of absence after being cared for and treated as tenderly as we may.

BEST VARIETIES. This is a leading question and one of importance to those interested in the rose and its future. We receive annually from foreign growers some sixty or seventy new varieties, and we may consider ourselves fortunate, if out of the entire number, we are able yearly to find three or four varieties that will stand the tests applied to standard sorts. The prime requisites for a good bedding rose are: 1st, color, form, size, texture of bloom. 2nd, vigor of growth and healthy leafage. 3rd, freedom and continuity of bloom. Varieties possessing the above points of excellence in a considerable degree are entitled to consideration; the best twenty-five ever-blooming roses for bedding purposes, measured by the above standard are: La France, Perle des Jardins, Catharine Mermet, Marie Guillott, Sou, de la Malmaison, Marie Van Houtte, Mme. Gabriel Drevet, The Bride, Sou, d'un Ami, Countess de la Barth (or Duchess de Brabant), Chas. Ravalli, Mme. Angele Jacquier, Mme. Welche, La Princesse Vera, Soubrere, Gloire d'Dijon, Comtesse of Pembroke, Letty Coles, Pierre Guillott, Papa Gontier, Antoine Verdier, Sunset, Mme. Jos. Schwartz, Comtesse de Barbatannes, Hermosa.

The above will bear our test; many other very beautiful roses, well worth extensive propagation are to be found among the following sorts; many of them possess charms unsurpassed by our first list, and we would not like to see them discarded for little faults of constitution or habit; they are: Coquette de Lyon, Mar. Robert, Mme. Watteville, Mlle. F. Kruger, Mme. Cusin, Devonensis, Mme. Dubroca, Edith Gifford, Camoens, Grace Darling, Comtesse Riza du Parc, Etiole de Lyon, Mme. Jean Sisley, Queens Scarlet or Agrippina, Mme. Lambert, Jeanne Abel, Maurice Kuppenheim, Henri Meynadier, Clement Nabbonand, Mme. Falco.

A group of pets might be formed of those varieties of singular beauty, but of not so strong constitution as those already listed, but well worth extra care and culture and producing buds and flowers of wonderful colors: Ye Primrose Dame, Valle Chamounix, Sou, Therese Levet, Ma. Capucine, La Nuance, Princess of Wales, Katie Metchersky, Nathalie Imbert, Viscountess de Cazes, Comtesse de Nadiallac.

Of course these could be dispensed with, and I predict that at no very distant day, list three will be almost unknown because we shall have new varieties combining their unique colors with stronger growth and better constitutions.

It would perhaps be a disappointment did we not glance over the later introductions to the ever-blooming classes. The following, I think, will rank among our standard sorts: Countess Frignense, a beautiful fellow of delicious scent, Viscountess Polkestone, almost ranking with La France, Susanne Blanchet, an





FLORAL ELK.

exquisite shell pink of splendid form, Reine Nathalie de Serbie, a distinct habited tea with finely formed flesh pink flowers; Meteor, a hybrid tea of bright crimson color, Mme. Perreau, a bright silvery pink seedling of the well known Sou. d'un Ami. Mme. A. Etienne, an apparently dwarf habited Catharine Mermet with charming buds of light pink. Luciole, a highly colored peachy crimson, charming in its tints and deeply scented, the Premier rose of the present year.

CONTINUED IN NEXT ISSUE.

MR. HENDERSON in a note to the FLORIST commenting on the fine appearance of roses grown at Forest Glen, states that the work there bears out his assertion that grafting is a necessity to renew and continue the health and vigor of forced roses.

#### Floral Elk.

Our handsome illustration is from a photograph of the stage decoration on the occasion of a reception of the order

of Elks at the City Hall in Springfield, Mass., on the eighth of July last. The flowers used in making the elk were principally white carnations, houvardia, pansies and sweet alyssum.

The very natural surroundings of the central figure did much to make the whole very effective as an artistic decoration. The piece was made and the decorations arranged by W. F. Gale a Springfield florist.



## Observation and Comparison.

BY A. E. WHITTLE.

Only by comparison can a man rightly estimate the standard he has attained. Whether his work is equal, inferior or superior to that of others, can only be told by careful observation. All professions are progressive and there is no such thing as being able to reach the utmost limit of the knowledge to be gained. No matter how constantly the ground may be turned over, there are always fresh facts waiting to be discovered by the patient investigator.

No one can know with accuracy the possibilities of the work to which he devotes his life, if he watches himself merely and measures his progress only by his own daily labor. A man may be unremitting in his efforts; laboring early and late; thoughtful and observant; yet, should he neglect the many opportunities that surround him of watching and observing his fellow laborers, he will never reach the summit, but will ever be trammelled by prejudice and ignorance.

A gift highly to be valued is originality. But even the man who possesses this faculty, should he depend entirely upon his own invention and resources, will never be renowned for genius among his fellows. When we read of the inner lives of great men, we wonder at the pains-taking care with which they seek for food for their brains; we remark also that they are ever on the watch to seize upon the minutest fact which may be of use to the work to which they are devoted. Vain men, only, are content with their own standard, and foolishly imagine that the knowledge which they have attained comprises all the information that can be gathered upon the subject; and are utterly indifferent to the fact that, to the student, they betray their ignorance as soon as they open their mouth.

Observation, then, is the faculty which must be cultivated if we would know ourselves as we are known. To compare, justly, our work with that of others, we must cultivate all our perceptive faculties. But this is systematically done only by a few. For example, how few there are, who, walking every day of their lives through a certain street, yes, perhaps, even two or three times each day, could state with perfect accuracy the characteristics of every house passed on their way! Intent upon our own plans and purposes, we neglect to observe the plans and purposes of others. Not a walk do we take but some new fact may be added to our store-house of knowledge.

Florists need as much as any men to improve their powers of observation. The memory may be so trained that anything once committed by it, will never be forgotten. The perceptive powers of our nature can also be so cultivated that any fact likely to be of use to us in our work may be noted and stored away for future use. But to be observant, and consequently, progressive, we must not be content to stay within our own little field. There are hundreds of other workers all as eager and industrious as we. A ramble amongst their fields will soon teach us the condition of our own. Weak indeed must be the ambition of that man, who, seeing a culture superior to his own, does not brace his energies to emulate if not surpass his wiser neighbor.

It is often said that florists who go gadling around neglect their own work by so doing. Moderation is a virtue in all things. A wise man can generally

tell the length of his rope. A humble searcher after truth will never deteriorate into a gossip. Students are always ready to recognize and welcome each other, and can be relied upon to freely use the key which will unlock their stores of knowledge.

It is for the purpose of extending our horizon and broadening our views, that conventions are held, and papers pertaining to our work are written. Those that diligently attend to the thoughts expressed, can not help being benefited. No two men look upon the same thing with the same eyes; one may see a shorter and more direct route to the end that is to be gained, than does the other.

Let us each then, look upon observation and comparison as necessary parts of our education; twin sisters always at the right hand of every man, and enabling them to become zealous and careful that all his efforts may have the stamp of careful preparation. Only by going where the honey is to be found, can the bees lay up a store. Staying at home is synonymous with an empty hive.

## New York.

Not more than half the florists that went to the convention have returned, as they improved the opportunity to visit western friends.

Young & Elliott are making a fine show of nymphaeas from Bordetown, N. J., gladioluses and vegetables.

John Henderson sends a thousand Perle roses to market daily.

The market is glutted with indifferent stock.

Wm. H. Brower made a column (broken) of white and blush roses for the funeral of Mr. Hunting that was four feet high and very elaborate. It brought a tall price.

Lawrence Hafner is passing his vacation at Amityville, Long Island.

L. D. Brower spends his vacation at Mendham, New Jersey.

The second annual Le Mout rose festival was held Aug. 31 at Carmansville park. This is a field day for florists and their friends.

Five thousand spikes of gladioluses were exhibited at Peter Henderson & Co.'s, and also a fine collection of Zebra zinnias, geraniums and dahlias, the 10th of August. The show brought crowds of visitors.

Wm. Walter Phelps has planted 10,000 trees on his New Jersey estate this season.

The scientists who were entertained in New York for a week during August received many elegant floral designs, and city florists received large orders for dinner decorations during their visit.

CRINUM ORNATUM.—During the convention I noticed on the president's desk a handsome bunch of these flowers, which I understand were kindly presented by Mr. J. Goode. It struck me that they should be a valuable summer flower, coming in as they do after the white lilies are gone. Had the flowers not been labeled, I should have mistaken them for Amaryllis longifolia, but on close examination they certainly excel the amaryllis in beauty. I should be pleased to hear from Mr. Goode as to his method of culture and where bulbs can be purchased. C. B. WHITNALL.

Will some large grower who has forced L. candidum in various ways give his method? Also state if they should be potted immediately or kept dormant for awhile. V.

SOMERVILLE, N. J.—Business has been very brisk, the volume of trade this year being nearly double that of last year. The call for handsome carpet bedding seems to have reached this locality, and several beautiful designs can be seen within a few blocks. L. H. Demaray has moved his range of houses from about three miles out in the country into the town proper. He has put in a 25-horse-power boiler, and will heat the whole place by low pressure steam.

## SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order.

**SITUATION WANTED**—As foreman or assistant by experienced man; single; best references. Address, L. H. B. No. 58 Cooper St., Camden, N. J.

**SITUATION WANTED**—By a competent gardener with 20 years experience, for a place preferred, can give good references. Address, JOHN WHITTAKER, 241 N. 15th St., Philadelphia.

**SITUATION WANTED**—Gardener, single, first-class greenhouse man; good propagator and plant grower. Address, GARDNER, Shoemakerstown, Montgomery Co., Pa.

**SITUATION WANTED**—By a good florist; single; German; understands all branches of the business well; either private or commercial place. Address, G. care American Florist, Chicago.

**SITUATION WANTED**—By a gardener, single, experienced in all branches of the business; can furnish good references. Address, J. A. G., care W. J. Stewart, 67 Bromfield St., Boston.

**SITUATION WANTED**—To grow roses, propagation, designing, fancy bedding, house construction, landscaping, single or married, sober, honest and reliable. Address, FLORIST, No. 8 Seaver Place, Boston, Mass.

**SITUATION WANTED**—Would like an interest and management in a good cooler, east or west. Good rose grower and propagator—roses preferred—in florist stock in general; sober and honest. Box 1140, Waltham, Mass.

**SITUATION WANTED**—Position in a commercial place as manager or foreman; understands the business in all its branches; growing, cut flowers, propagating, &c. Good references. Address, 521 Webster Ave., Scranton, Pa.

**SITUATION WANTED**—By a competent and experienced gardener, on a private place. Salary expected \$25 a month with board and lodging, or \$45 a month if board myself. Address, R. care American Florist, Chicago.

**SITUATION WANTED**—By a first-class gardener and florist with great experience in all branches of his profession; expert landscape gardener and draughtsman. Anything honest entertained. Address, M. A. SCHUB, care W. Stewart, 67 Bromfield St., Boston.

**SITUATION WANTED**—Position in a commercial or private place as manager or foreman; understands the business in all its branches; growing roses, cut flowers, propagating, &c. 8 years experience; married. Address, O. F., 24 Henry Street, Chicago.

**SITUATION WANTED**—By a first-class designer and florist, or would take charge of retail seed store, of which I understand thoroughly all details. 15 years experience. Can furnish best of references. Address, A. B. C., care American Florist, Chicago.

**SITUATION WANTED**—As florist or gardener, or would take the management of a small commercial place, thoroughly experienced in all branches, especially roses and orchids. Can keep books and correspond. Englishman. Address, FAIRFUEL, care Am. Florist.

**SITUATION WANTED**—By a competent German landscape gardener and florist. Desires position to lay out a place or to take charge of a city park or business private residence. References available. Senders & Hencke, florists and nurserymen, 1231 Olive St., St. Louis, Mo., or Martin Gillet & Co., Baltimore, Md. Address, W. B., 1220 Olive St., St. Louis, Mo.

**WANTED**—Every florist to order ready packed crates of pots—see our "ad." ask prices and frt. Orders filled instantly. Cheap frt. to all Western towns. SYRACUSE POTTERY, Syracuse, N. Y.

**WANTED**—A young man who understands the florists' supply business in the basket and mortar line, one with trade preferred; must have first-class references. Address, ERNST KATPMANN, 118 N. 4th St., Philadelphia.

**WANTED**—A practical florist to take charge of greenhouse, one who thoroughly understands the business. State salary; must have references. Married man preferred. Address, GARINER BROS., Seedsmen and Florists, Freeport, Ill.

**FOR SALE**—Two greenhouses 18x35 each, with office 2x15; the retail location in center of Chicago. Everything in first-class running order, will be sold at a reasonable price for cash. Address, MACK, care American Florist, Chicago.

**FOR SALE**—Greenhouse and stock, lot 105 x 140 ft. In town of 25,000 inhabitants, 12 miles of Philadelphia. Address, J. C. A., 248 Chestnut St., Phila.

**FOR SALE**—In the western suburb of Montreal, four greenhouses, dwelling, stock and good sized lot. H. & T. WARE, 8 Phillips Square, Montreal, Can.

**FOR SALE**—Greenhouses and stock, in fine condition, located near Chicago, or would take a good partner at reasonable price. For particulars address Q, care American Florist, Chicago.

**FOR SALE**—Greenhouse in a good town of 5,000 population; good trade; gas for fuel; size of house 19x30; near the square. Cause for selling sickness. MRS. S. H. CASKEY, Greensburg, Ind.

**FOR RENT OR LEASE**—Five medium sized greenhouses, some hot-bed sash, 8½ acres good land, dwelling house, all necessary out-buildings, &c. Good business in flowers and vegetables; 15 years established. Address, E. MCNALLY, Anchorage, Ky.

**FOR SALE**—Just building two new greenhouses, and stock of an old established business for a large trade, for sale cheap. Will sell ground also, or give as long lease as wished, and at very easy terms. Located in a live, booming western city of hundred thousand inhabitants. Address B. S, care American Florist, Chicago.

**FOR SALE**—Established florist business, paying from the start, in a first-class business town. Greenhouses new, heated by hot water, corner lot 30x150 feet, city water, electric light, telephone, two railroads, population 15,000, and 20,000 acres in radius of ten miles doing their trading here. Business can be rapidly increased. No greenhouse within 25 miles. Owner has a large wholesale business which requires his whole time. Only those meaning business address A. J. SWALM, Hazelton, Pa.

**FOR SALE**—In the city of Atchison, Kansas, three greenhouses and stock of an old established florist business, heated throughout with Hitchens & Co's No. 16 hot water boiler; three thousand feet of glass, full stock of plants, dwelling house, coal sheds, well, cistern, &c. City water, electric lights and telephone; situated on the main thoroughfare and street car line; 124 feet frontage. Must be sold at once on account of failing health. For particulars address S. AYFORD, KEITH & HENDERSON, Real Estate Dealers, Atchison, Kan.

**FOR SALE**—The undersigned offers her entire establishment, consisting of a large garden with two large greenhouses provided with hot water furnaces, one dug well of good water; water supply by hydrants; dwelling, barn and out-houses, all nearly new. Five acres of land under high cultivation, garden implements, horse, wagons, cutter, harnesses, a large stock of seeds, plants, shrubbery, &c., &c. The above is situated within the city of easy access, and the offer is in fact a rare opportunity for a live, energetic gardener, as the business well established and remunerative. Cause of disposal is the death of my husband. Parties desirous of purchasing will please address for particulars, MAGDALENA DILGER, Eau Claire, Wis.

### FOR SALE.

A very desirable florist's business in a live western city of 40,000 inhabitants. Business well established and now doing a fine local and shipping trade. Sales last year nearly \$7,000. All data will be furnished to possible purchaser. Failing health of proprietor is sole cause for selling. Price \$10,000; to an energetic and responsible man would sell with a cash payment of but \$1,500 down, balance on time. If you think of buying, don't fail to investigate this before doing so. For further particulars, address, G. L. GRANT, 54 La Salle St., Chicago.

Die Erzieh. der Pflanzen aus Samen.  
**EIN NEUES HANDBUCH IN DEUTSCHER SPRACHE**  
VON GARTNER UND FLORISTEN,  
herausgegeben von H. JAEGER und E. BENARY.

Preis bei Post, \$3.25.

Zu verkaufen bei J. C. VAUGHAN, CHICAGO.

### ROSES.

Per 100  
Cooks, Mermets, S. D. Ami, 4 4-inch pots, ..... \$ 8.00  
Bon Silene, Adam, Safrano, 4 4-inch pots, ..... 6.00  
Mad. Watteville, 4 4-inch pots, ..... 10.00  
Jean Sisley, 4 4-inch pots, ..... 8.00  
Cusin, 4 4-inch pots, ..... 8.00  
Brides, 9-in. and 4-in., ..... \$10.00 per 100  
Cooks and Mermets, one year old, strong, 4-in., ..... \$10.00  
and 8-in. pots, ..... \$10.00 per 100  
\$MILAX, strong plants, 2½-in. pots, \$3.00 per hundred; \$2.50 per thousand.

### CARNATIONS.

Peerless, Edwardsli, Hünze's White, Portia, Jas. Garfield and many other old and new sorts. List of varieties and prices on application.

### VIOLETS.

Marie Louise and Swanley White. Price on application.

I. C. WOOD & BRO., Fishkill, N. Y.

### STOCK FOR SALE.

Per 100  
Perles, 4-inch pots, ..... \$12.00  
Am. Beauty, fine, ..... 25.00  
Bennett, ..... 20.00  
La France, ..... 15.00  
Souv. d'un Ami, 3-in. pots, ..... 8.00  
Good, clean, healthy stock. Liberal discount on orders of 200 or more.

W. C. GERMOND, Sparkill, Rockland Co., N. Y.

## COMTESSE DE FRIGNEUSE

OR

### Golden Perle.

FINE PLANTS, \$20.00 PER HUNDRED.

BRIDE, DUKE,

NIPHETOS,

PERLE,

BENNETT,

LA FRANCE,

And others. All grown from selected wood for bench planting.

SEND FOR SUMMER TRADE LIST.

GEO. W. MILLER,

(Successor to Miller & Hunt.)

WRIGHT'S GROVE, CHICAGO.

Mention American Florist.

## Surplus Stock of ROSES.

### THE BRIDE.

3-inch pots, per hundred ..... \$ 8.00  
4-inch " " ..... 12.00

### BON SILENE.

3-inch pots, per hundred ..... \$ 5.00

### CORNELIA COOK.

3-inch pots, per hundred ..... \$ 5.00

All strictly first-class stock, and ready for benching at the present time. ORDER EARLY.

## CRITCHELL & Co.,

CINCINNATI, OHIO.

Mention American Florist.

## FOR SALE.

### THE CUTS

USED IN ILLUSTRATING THIS PAPER.

Write for prices on any which you have seen in previous issues and would like.

AMERICAN FLORIST CO.

CHICAGO.

## OUR SPECIALTIES.

## NOVELTIES IN ROSES AND OTHER PLANTS.

— ALSO —

FLORISTS' STOCK FOR FORCING.

HILL & CO.,  
RICHMOND, IND.

## THE NEW ROSES,

American Beauty, Bride, Her Majesty,  
W. F. Bennett, Papa Gontier.

Also good plants of the best leading varieties of Teas, H. Teas, H. Perpetuals and a general collection of greenhouse and bedding plants at a very low price. Send for prices.

JACOB SCHULZ,  
1325 E. Broadway, Louisville, Ky.

## ROSES.

20,000 YOUNG ROSES

In 2-inch and 2½-inch pots in the condition of the following varieties:

American Beauty, The Beauty, Mermets, Perle, Niphotos, Bennett, Pierre Guillot and La France.

For prices, apply to GARFIELD PARK ROSE CO.

1658 W. MADISON STREET, CHICAGO.

## ROSES.

Large Fine Plants from 4-inch pots.

Catharine Mermets, ..... Per 100  
Perles, Niphotos and Mme. Watteville, ..... \$10.00  
\$MILAX, ..... 12.50

Strong plants from 2½-in. pots, \$3 per 100; \$25 per 1000.

## THEO. BOCK,

Cor. 10th & Reaton Sts., HAMILTON, O.

C. A. PETERS,  
FLORIST,

PRICE HILL, CINCINNATI.

HYBRID PERPETUAL ROSES  
A Specialty.

One year old, grown in pots, for winter and spring forcing. Write for prices.

## BUDED ROSES

For Winter Forcing or Spring Market Sales.

In excellent condition, large two year old bushes, grown out doors, in all the leading varieties of

HYBRID PERPETUAL AND TEAS.

Ready for shipment on and after October 1st.

CATALOGUE AND PRICES ON APPLICATION.

TERMS: Cash with order.

SCHULTHEIS BROS.,

Rose Growers,

COLLEGE POINT, L. I.

## ROSES.

We can still offer fine plants of the following Roses in excellent condition for planting on benches:

PURITAN,

PAPA GONTIER,

THE BRIDE,

AM. BEAUTY,

PERLES,

SOUV. D'UN AMI,

CATHARINE MERMET,

BENNETT,

BON SILENE,

NIPHOTOS.

Correspondence solicited, as we are prepared to quote very low prices on most varieties.

B. A. ELLIOTT CO., Plantmen,

Pittsburg, Pa.



## The Out-Flower Trade.

## September Floral Styles.

BY OUR NEW YORK CORRESPONDENT.

The edgings of all stylishly arranged flowers are of considerably deeper colors, but the main effects are still light, pale pink, delicate yellow, and white predominating. As one season wanes and another opens, I am impressed with the increased pains taken by our florists in their make-up, the fine taste exercised, and the careful attention to minute details. I may here say that this is demanded. Slouchy work is no longer acceptable, and even in shops in localities where low prices are the rule, neat and stylish make-up and nice handling of blossoms is expected.

Fall fashions are only foreshadowed. They will not really be out in force before Oct. 1, when the taking styles are held out, many of them, and run far into the winter. The only elegant decorations that are made take place out of town, and are done by florists who have branch establishments in the locality, or go out to superintend.

Bouquets made at the present are exceedingly pretty. They have large white centers and edgings of the same flowers in deeper colors. Hand bunches of white rosebuds or those of very pale pink have deep borders—from one to three rows—of Bennett or Beauty roses. Bouquets of asters are extremely stylish. White asters fill the center, and the border is of those of the rich purple color. They are finished with a sash of white or purple moire. The deep-tinted pea blossoms are now employed for edging bouquets where the center is of pink or white flowers of this kind. The sash is of the lighter tint, and there is sometimes one large Beauty rose in one side.

Corsage bunches have the same pale centers. Hydrangeas are used for morning wear or for walking toilets. The middle of the cluster is made of small white trusses of this flower, and the edging is of purple or deep blue ones. Corsage bouquets for full dress are composed almost universally of roses, with a strong preference for pink and crimson colors. When yellow is desired daisies or chrysanthemums are most frequently employed. Waist bouquets with centers of small Mermet buds, with a band of Beauties surrounding and a full cluster of rose leaves covering the stems, is the handsomest ornament of this kind tied up this week.

An exceedingly chaste set of dress designs was made at Newport last week for an evening garden party. A gown of rose-colored tulle was garnished with a girdle of Mermet and Bennett buds. This girdle was tied low on the left side of the skirt and finished with an addition of three American Beauty roses. The corsage was sleeveless, but around the armhole was a very neatly fitted "cap" of rosebuds, three deep on the top of the arm and narrowing to one where the arm touches the waist. If these floral sleeve caps are carefully fitted they are a unique and charming finish; the foundation should be fitted by a dressmaker and then sent to the florist for decoration. No florist should attempt anything of the kind, however, who has not the high standard of taste and the neat workmanship of an artist.

Garniture of gowns with natural flowers will be very fashionable this autumn, particularly for weddings. Bridesmaids' gowns will have no trimmings excepting

blossoms and foliage during September. Pompon chrysanthemums will be employed largely on white surah silk frocks, which are the mode for young bridesmaids. The bonnets will be composed entirely of this flower. An order has been received for a wedding the 10th inst. for the garnishing of the bride's gown with white carnations. There are to be set clusters of these blossoms with long stems placed wherever there is any display to be held. They will be worn to fasten the veil and in a small knot at the breast. The wedding bouquet will be tied loosely of long stem carnations and Bride roses.

Dinner designs alter very little and will not be defined for another fortnight. Swimming lilies are very favorite. Nothing can be finer for an evening dinner than a center of water lilies under the middle light. There is always a wide border of ferns made, and in these at present are placed the ladies' favors, which are corsage bunches made up in the style above described. Fairy lamps are frequently introduced in the fern borders around water lily centers, and one of these is often suspended from the pendant lamp.

Beautiful effects are being made with flowers in the decorations of piano lamps. A bank of blossoms is built around the high standard stem of the lamp, and a canopy over it is suspended or attached for support to the one made of silk or lace, which is the usual finish of these useful and ornamental affairs. They are sometimes set in a base of foliage and light vines trimmed around the rod that supports the lamp. They are susceptible of many novel arrangements, and as they will find their way into many drawing and music rooms, they will be made a feature of parlor ornamentation this season.

Crimson coxcombs and brilliantly colored immortelles are fashionable used in the fire-places now built in the corridors of modern cottages. These fire-places, with the quaint mantels above, give fine opportunity for floral adornment, and are improved by our florists for graceful effects. Flame-colored plants, red and yellow gladioluses and tiger lilies, are so adjusted as to form a splendid mass in the large fire places.

The cobweb, made on a thread-like foundation of silver wire, of dust-colored foliage or gray statice, is a very æsthetic feature of room adornments in the large arrangements made lately at Newport. The web is generally spun across a group of foliage. It requires a distinct background to show it off. It looks the best when placed among the decoration of a veranda; it is also very suitable for a corridor where a conspicuous effect is desired.

A baby's toilet basket is among the novelties for gits to little strangers. These baskets are lined with lawn, lace and ribbon, trimmed after the regulation style, and are then to be completed by the florist. Clusters of rosebuds are put in the pockets and a vine or garland around the edge. Sometimes these baskets stand on a table of straw-work, which is wreathed with foliage, and is finished by a wide white sash either wound around it or tied in a bow at one side.

Florists are receiving orders to decorate houses for the return of families from the country. This is quite the fashion with the Hebrews and Germans, who are generous patrons of flower stores. More greenery is used in these "welcome embellishments" than flowers.

## A Convenient Order Sheet.

We give herewith an order sheet in use by Frank Whitnall & Co., Milwaukee, which should recommend itself to every florist. The use of this or a similar sheet greatly facilitates the handling of orders, and reduces the chances of aggravating errors to a minimum.

In handling cut flowers and plants, much depends upon their being delivered at the right time to give satisfaction, and anything which will reduce the chance of mistakes should be adopted.

## ORDER.

.....188.

Deliver To.....

Address.....

Time to be delivered.....

Article..... Price.....

Card No.....order book folio.....Am't p'd ..

Charge to.....

## BOX LABEL.

Name.....

Address.....

Card No.....

As will be noticed, the label or tag to go with the goods is attached to the order sheet, which is not taken off until the order is filled. This provides effectually against the possibility of one customer getting another customer's order, which is not as rare an occurrence as it might be.

When the customer giving the order wishes his or her card to go with same, the card is placed in a small envelope, which is numbered, and the same number placed in the blank space after "Card No." This provides against any error being made in sending a card with the wrong order, which is a source of great annoyance to the purchaser when it happens, as it often has, in a rush of work. It is also a reminder that there is a card to go with the order, and assures that it will not be overlooked. Many a florist has lost a customer from some little oversight in this matter.

This order sheet should be about 5 x 8 inches in size, and can be gotten up by any printer at slight expense.

## New York Retail Prices.

Perles, Niphetos, Souvs, Bennetts and Jacqs, \$1; Cooks, \$2; American Beauty, \$2.50; Mermetts, \$1.25; La France, \$1.50; Bon Silenes, 50 cents; carnations, 40 cents, and gladiolus, 75 cents a dozen.

FRANKLIN, Pa.—W. T. Bell is preparing to hold an exhibition of chrysanthemums, beginning in October and continuing through November and December. A temporary house, 100 x 20, will be erected for the purpose.

**THE AMERICAN FLORIST**

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 Cents a Line, Agate;  
Inch, \$1.40; Column \$14.00.  
Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per  
cent; 12 months, 20 per cent.

No reduction made for large space.

The Advertising Department of the AMERICAN  
FLORIST is for Florists, Seedsmen, and dealers in  
wares pertaining to those lines ONLY. Please to  
remember it!27 Advertisements for September 15 issue must  
REACH US by noon, Sept. 10. Address,

THE AMERICAN FLORIST CO., Chicago.

**Catalogues Received.**

A. C. Nellis & Co., New York, seeds;  
Hiram Sibley & Co., Rochester, N. Y.;  
bulbs and plants; U. S. Waterproofing  
Fibre Co., New York, patent plant bed  
cloth; James King, Chicago, bulbs; H.  
H. Berger & Co., San Francisco, Lily and  
other bulbs; F. A. Miller, San Francisco,  
California tree seeds and bulbs; P. J.  
Berckman, Augusta, Ga., nursery stock;  
Currie Bros., Milwaukee, bulbs and seeds;  
J. J. Harvey, Richmond, Va., plants;  
Michael Rains & Co., London, England,  
Dutch bulbs; J. C. Vaughan, Chicago,  
bulbs.

IMMATURE.—If you will write to this  
office, giving your address, we will reply  
by mail to your questions, which are not  
of sufficient general interest to be an-  
swered through these columns.

DOUBLE GLAZING POINTS.—H. W.  
Eames & Co., Milford, Mass., send us  
samples of their double glazing points.  
The points are made to hold the glass at  
the laps, part of the point securing the  
upper light, while a shoulder prevents it  
from slipping and also secures the lower  
light as well.

TWO ILLUSTRATIONS which appeared  
in our issue of July 15 as original en-  
gravings should have been credited to  
the *London Garden*, as they first ap-  
peared in that excellent publication,  
though the fact was unknown to us at  
the time of their use in the FLORIST. The  
illustrations were "New Funeral De-  
sign," page 496, and "Caladium Meyer-  
beer," page 487.

THE U. S. WATERPROOFING FIBRE CO.  
of New York send us samples of their  
patent plant bed cloth for hot beds and  
cold frames. This useful substitute for  
glass sash for many purposes on a florist's  
or gardener's place is well known, but  
until recently the cloth had to be water-  
proofed by the user. Now, however, it  
can be obtained at a low price from the  
company above named in any quantity  
desired.

GRAFTED AND OWN-ROOT ROSES.—  
Mr. F. F. Smith of South Englewood,  
Chicago, proposes to demonstrate for his  
own satisfaction the relative value of the  
two for forcing roses. He has on a  
section of a bench two lots of Ni-  
phetos—fifty grafted and fifty on own  
roots—planted side by side. At this date  
both lots present about the same appear-  
ance, all being of the same size and de-  
gree of vigor, the plants having been  
carefully selected with a view to this  
test. An accurate record of the product  
of each lot will be kept, and the result  
will be stated to the readers of this paper.  
The treatment of both lots will be identi-  
cal, and the result cannot but be of inter-  
est to all.

**Wholesale Markets.****Cut Flowers.**

BOSTON, Aug. 25.	
Roses, Teas.....	1.00
" Fancy.....	3.00 @ 5.00
" Beauties and Hybrid.....	5.00
Lily of the valley.....	6.00
Asters.....	50 @ .75
Gladioli.....	3.00 @ 5.00
Smilax.....	12.00
Adiantum.....	1.50
NEW YORK, Aug. 25.	
Roses, Perles, Niphotos.....	\$4.00
" Bennets, Souvs.....	4.00
" Am. Beauty.....	10.00
" Bennets.....	4.00
" Safran, Bon Silenes.....	1.00
Carnations.....	2.00
Gladioli.....	1.00
Mignonette.....	1.00
Smilax.....	15.00
CHICAGO, Aug. 25.	
Roses, Perles, Niphotos.....	1.00
" Mermets, Bennets.....	5.00
" Am. Beauty.....	10.00
" Bon, Safran.....	1.50
Carnations.....	15.00
Smilax.....	15.00

PHILADELPHIA, Aug. 25.	
Roses, Teas.....	\$ 1.50
" Perles, Mermets.....	4.00
" Niphotos, Bennets.....	3.00
" La France, Jacques.....	5.00
" Am. Beauty.....	8.00
Carnations.....	50 @ .75
Gladioli.....	.50
Callos.....	.50
Gladioli.....	3.00
Callos.....	10.00
Smilax.....	20.00
Corn stalks.....	4.00
Corn flowers, bunch.....	.25

If you want FRESH FLOWERS of  
best quality, carefully packed and prompt-  
ly shipped, order from

**WM. J. STEWART,**

67 Bromfield Street, Boston, Mass.

**W. S. ALLEN,**

Wholesale Dealer in

**CUT FLOWERS,**

Has moved from 940 Broadway to 36 East 23d St.

**W. S. ALLEN,**

36 EAST 23rd STREET, NEW YORK.

**JOHN KEYES,****WHOLESALE - FLORIST**

No. 11 West 27th Street,

Near Broadway, NEW YORK.

Consignee of the principal growers about New York.  
Lilies of the Valley and Lilacs at all times.**JOHN J. PERKINS,**

Wholesale and Commission

**»FLORIST«**

59 West 28th Street,

(Telephone No. 675, 39th St.) New York

Branch, 38 S. 16th St., Phila., Pa.  
Greenhouses, Creskill, N. J.**W. F. SHERIDAN,****WHOLESALE FLORIST**

721 SIXTH AVENUE, N. Y.

Mention American Florist.

**EVERY FLORIST**

Should have our

**New Trade Directory.**

ADDRESS,

**AMERICAN FLORIST CO.,**

CHICAGO.

**Thos. Young, Jr., & Co.,****Wholesale Florists,**

INCORPORATED 1885,

23 West 23d St., NEW YORK.

**GEORGE MULLEN****\*—WHOLESALE FLORIST—\***  
17 CHAPMAN PLACE, (Near Parker House)

BOSTON, MASS.

Orders by Mail, Telephone, Telegraph or Express  
promptly attended to. Night delivery should  
be sent at full rate to insure delivery for  
early morning trains. Store open from 7 a.  
to 9 p. m. Return telegram if order cannot be filled,  
or if desired in any case. Mention Am. Florist.

**J. C. VAUGHAN,****WHOLESALE CUT FLOWERS**Direct all cut flower orders to cut flower  
department

VAUGHAN'S SEED STORE, 42 La Salle St., CHICAGO.

**WELCH BROS.,**  
**WHOLESALE FLORISTS,**

165 Tremont Street, BOSTON, MASS.

We make a specialty of shipping choice Roses and  
other Flowers, carefully packed, to all points in  
Western and Middle States.  
Return Telegram if order cannot be filled,  
or if desired in any case. Mention Am. Florist.

**HAMMOND & HUNTER,**

Wholesale dealers in

**Cut Flowers and Florists' Supplies**

61 West 30th Street, NEW YORK.

**LaRoche & Stahl,**  
**Florists & Commission Merchants**

—OF—

**CUT FLOWERS,**

1237 Chestnut Street, - PHILADELPHIA.

Consignments Solicited. Special attention paid to  
shipping. Mention AMERICAN FLORIST.**C. STRAUSS & Co.**

Telephone 977-3. WASHINGTON, D. C.

Grower of and Wholesale Dealers in

**ROSES and OTHER CUT FLOWERS**

1000 Puritan Planted for coming Winter.

**CUT FLOWERS**

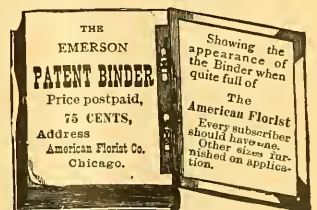
The choicest Cut Flowers at lowest market rates  
shipped C. O. D. Telephone connection. Use A. F.  
Code when ordering by telegraph. For prices, etc.,  
Address,

**J. L. DILLON, BLOOMSBURG, PA.****ROSS & MILLANG,**  
**Wholesale Florists,**

NO. 1168 BROADWAY,

(Formerly at 225 5th ave.)

Bet. 27th &amp; 28th sts., NEW YORK.





## From the Hub to Chicago.

The delegation from Massachusetts to the convention left Boston on Sunday, Aug. 14, via Hoosac Tunnel and Niagara Falls. The weather was perfect, nobody had to run for the train, and the special car provided for the occasion was comfortably filled with a party well prepared to make the most of their opportunities for a high time. Here were representatives of all the different interests connected with the florist's business. The producing interests were well represented by the nursery man, the adiantum man, the orchid man, the rose grower and the carnation specialist; the commercial interests by the wholesaler and the retailer; the construction department by the steam boiler man and the man with the patent glazing tools, and the literary interests by the horticultural book agent.

A wrecked freight train caused a delay of about an hour shortly after leaving Boston, but the impatience caused by this was appeased by a good supper at Athol. The rugged scenery of western Massachusetts gave much pleasure, and the passage through the mountain via the great tunnel was an experience that will long be remembered.

Additional recruits were picked up at Utica, Syracuse and Buffalo, and the unfortunate individual who had assumed the duty of assigning berths was put to his wits' end to supply a "lower" to everybody.

A stop was made at Niagara Falls, and Monday forenoon was most pleasantly spent in visiting the different points of interest there. The trip through Canada was a lively one, whist, singing and story-telling beguiling the time, and it was long past midnight when the patient porter saw the last of his merry charges safely tucked away in bed.

Chicago was reached early Tuesday morning, and the maps of the city thoughtfully supplied by the AMERICAN FLORIST were highly appreciated by the strangers. The return trip was made four days later, everybody delighted with their visit, and all agreeing that, "Deo volente," they would never miss another convention.

## THINGS WE SHOULD REMEMBER.

That the railroad people treated us so generously. That Temple can tell most wonderful stories. That Pennman found the way to our hearts on the return trip. That Welch as master of ceremonies, Grey as commissary, and Scott of Buffalo as speech-maker, have no equals. That Calder attracts the ladies. That Whittle very sensibly deserted the New Yorks and joined the Bostons. That Morgan of Auburn can talk.

## THINGS WE CANNOT FORGET.

Peter Ball's pot of red paint, Matthews' smiling countenance, Fred. Mathieson's careful instructions about when to "hit," Long's prudence and fondness for walking, Montgomery's modesty, Quinlan's dignity, and Chicago's beautiful parks.

S.

## Obituary.

JOHN B. MOORE.—This well-known horticulturist died at his home in Concord, Mass., on Sunday, Aug. 21.

Mr. Moore has been a prominent member of the Mass. Hort. society since 1849. He served many years on the executive and other important committees, and was elected president of the society for 1885, and was also elected in the latter

part of 1884 to fill the unexpired term of the late F. B. Hayes, who died in office. Mr. Moore also served on the State Board of Agriculture for some years, and has filled a number of public offices in his native town.

At his farm in Concord originated many new and improved varieties of fruit and vegetables, among which are the F. B. Hayes and the Moore's Early grape and Moore's Early corn. Grapes and hardy roses were Mr. Moore's especial favorites, and his hybrid perpetual roses have long been known as among the best coming into the Boston market or shown at the horticultural exhibitions. In business Mr. Moore was diligent and methodical. His farm was a perfect model of neatness, and his habits of promptness and strict accuracy in everything were well known. Socially he was genial and easily approached, yet always bore a quiet and dignified reserve.

He was a man of fine physique, and although 70 years of age, he appeared much younger. He leaves three daughters and one son.

S.

## Trade Notes.

KINGSTON, PA.—Geo. Carr has built a new house 75 x 11.

MILWAUKEE.—Wm. Edlefsen has opened a seed and flower store at 328 Chestnut street.

SCRANTON, PA.—George Clark has laid plans for two new houses to be devoted to soft-wooded plants.

ALBANY, N. Y.—Mr. John Dingwall, Jr., has started into business on the Troy road, where he has erected four new greenhouses.

MEMPHIS, TENN.—Weather here has been cooler, with plenty of refreshing rains. The Floral Co. have completed one new house. Business rather dull now.

BELLEVILLE, ILL.—Gus Grosshart has started into business here with two houses, 20 x 75 each. Most of the flowers grown here go to the St. Louis market, which is only fourteen miles distant.

LONDON, ONT.—The fifteenth "Western Fair and Industrial and Art Exhibition" will be held here in Queen's park Sept. 19-24. Prize lists may be obtained from Geo. McBroom, secretary, London, Ont.

WINNIPEG, MANITOBA.—The flower show which was to have been held by the Manitoba Floral association Aug. 11-12-13 has been postponed. Announcement of new dates will be made soon by the secretary.

LOUISVILLE, KY.—Haupt Bros. have admitted to partnership Mr. Gerhard Epping, and the firm name is now Haupt Bros. & Epping. The firm will build two large new houses this summer, and will heat by steam.

HARRISBURG, PA.—Joseph Schmidt has built two new rose houses, 60 x 16 each, and has arranged his heating apparatus to heat by steam. His place is now one of the largest in the city and the only one heated by steam.

PHILADELPHIA.—La Roche & Stahl are building a new house 18 x 100, and are arranging to heat all their ten greenhouses by steam, putting in 5,000 feet of pipe and two boilers. They make a specialty of Jacques for winter blooming and smilax for cutting.

MILWAUKEE.—The Wisconsin Florists' and Gardeners' club was organized with a charter membership of eighteen Aug. 25, and the following officers elected: James Currie, president; C. B. Whittall, vice-president; Frank Hall, secretary; Wm. Kitzrow, treasurer; F. R. Ellis, H. Haessler and Geo. Kingrose, executive committee. Many others in the trade have signified their intention of joining.

ST. LOUIS.—The florists of the city have formed an organization under the title of the "St. Louis Florists' Exchange," with the following officers: J. M. Jordan, President; Henry Michel, vice-president; Luther Armstrong, secretary; Alexander Waldbart, treasurer; S. Kehrman, Jr., Chas. Connon and Chas. Juengel, trustees. Meetings are to be held at least once each month. The membership fee is \$5, and after one year's membership annual dues of \$1 are required. Much good is expected from this organization.

INDIANAPOLIS.—Our boys came home from the convention in good shape, and are well pleased with the work of the meeting. The Indiana florists turned out even better than expected. The meeting of the Indiana society at Chicago during the convention was well attended and some important business was transacted. Our members were greatly pleased with the parks of Chicago, and will try to work up a movement here to have our shabby parks trimmed up. The president and ex-president of the S. A. F. were with us Aug. 24.

WILKESBARRE, PA.—W. M. Eldridge has purchased three acres of land just outside of the city, and has built two rose houses, 150 x 20 each. He still reserves his office and greenhouse in the city. He will heat the new houses by steam, using a 75-horse-power locomotive boiler. B. F. Dorrance has added eight span roof houses 80 feet long, and two long ranges 250 x 18 to his already large area of glass. He heats by steam. Mr. Dorrance has faith in American Beauty, devoting 300 feet to that variety. George Fancourt manages this branch of the business for him. Marvin & Nagle, an energetic young firm, have built a rose house 120 x 18.

## Boston.

The Gardeners' and Florists' club now boasts 250 members.

David Allan now rejoices in a family which numbers one more than it did a month ago.

Abundant rains in this section have made the grass and foliage as beautifully green as in June.

Asters of all colors are very plenty; enormous window decorations formed exclusively of these flowers are all the rage in the florists' stores.

Mr. John Galvin, who was badly injured at the Rocky Point excursion, is doing as well as could be expected, and now seems to be on the highway to recovery.

The annual exhibition of the Mass. Hort. society in September ought to attract many florists and fruit growers from all over the country, as it is to be held in conjunction with the meeting of the American Pomological society. The large hall in Mechanics building has been secured for the exhibition, which will be a notable one in many respects. The prizes are liberal and competition is open to all.

W. J. S.

## Chicago.

The boys on whom devolved the labor of preparation for the convention presented a wearied appearance. Those who showed some of the eastern delegation around the town have blue circles around their eyes.

The welcome rains which a fortnight since came to our relief, have started vegetation into active growth, with the exception of spots in some badly burned lawns where the grass has apparently been killed to the roots. The damage to florists' stock which was plucked out has been very great.

That game of base-ball at South Park, Friday between a nine from the visitors and one from local florists was extremely hilarious. But three innings were played, resulting in a score of 18 to 4 in favor of the Chicago boys. It is whispered that the "Only" Gallagher has a "Charley horse"; he certainly "let her go" in great style, and "at last report by our special wire" he was still running the bases. This gentleman takes up considerable room and uses up a great deal of the surrounding atmosphere, but he gets there just as hard. When Mr. G. rolls up his sleeves and straightens back his shoulders something has got to give, even if it is his wind. James Currie of Milwaukee, who umpired the game, was at last report considered out of danger.

**CLEANING BRICK FLOORS.**—In reply to J. A. B., inquiring in reference to cleaning brick floors of green slime: Let him procure a one-pound tin can of concentrated lye; that he can buy at any grocer's. Break it into lumps as small as a walnut, put in a wooden pail and fill with boiling water and let it stand twelve hours; then take a stiff broom—one half worn is best—dip it in the bucket and scrub the bricks well; then wash with clean water. He will find his floor as bright as bricks fresh from a kiln. I hope some one will answer the "crude oil for fuel" inquiry. W. R.

ONLY POTTERY MAKING A SPECIALTY OF

## FLOWER POTS FOR FLORISTS.

THE WHILLDIN POTTERY CO.,  
713 & 715 WHARTON ST.,  
PHILADELPHIA.

## Conservatories

GREENHOUSES, ETC.

Erected in any part of the U. S. or Canada  
Glazed on the

Helliwell Pat. Imperishable System  
OR WITH PUTTY.

For further testimonials, illustrated catalogue or estimates address

JOSEPHUS PLENTY.  
HORTICULTURAL AND SKYLIGHT WORKS.

Offices, 144 Pearl Street, NEW YORK.

### CARNATIONS, CALLAS, ROSES.

And other Fall Stock.

Carnations, extra strong clumps, from open ground. Hinz's White, P. Henderson, Pres. Garfield, &c., ..... \$ 8.00  
Hydrangea—Otuska, Thos. Hogg, &c., strong, 5-in. and 4-in. pots, ..... \$8.00 and 10.00  
Callas Ethiopien—Extra strong, 4-in. pots, ..... 8.00  
Bouvardias—double & single, best sorts, clumps 10.00  
Passiflora, new, Constance Elliott, strong p'ts, 7.00  
Roses—Marcel Niel, extra strong, ..... 5.00  
Other plants suitable for fall trade, at Lowest Prices. F. A. LUTZ & SON, Newcastle, Pa.

## GROWTAGE'S PATENT BUILDING FOR HORTICULTURE



— GLAZED WITHOUT PUTTY. —  
Endorsed by the New York Horticultural Society.  
Illustrated Circular mailed on application.  
Plans and estimates given for every description of Horticultural Buildings.

H. J. GROWTAGE,  
76 Myrtle Avenue, BROOKLYN, N. Y.

## SYRACUSE POTTERY READY PACKED CRATES OF POTS

As proposed, f. o. b. buyer's risk, cash with order, price per crate of 3,150 Thumbs (1½ x 2¼-in.)... \$ 8.25;  
2,625 2½-inch, \$ 8.25; 1,875 2¾-inch, \$ 7.50;  
1,150 3-inch, \$ 5.75; 600 4-inch, \$ 4.75;  
350 5-inch, \$ 4.40; 156 6-inch, \$ 3.75;  
189 6-inch, 125 5-inch, and 80 6-inch, for \$ 5.00;  
108 7-in., hand-made \$4.25; 60 8-in., hand-made, \$ 4.10;  
Freight just reduced to nine points, to New Orleans or St. Paul only \$1.35 a crate. Write for latest prices. Long list of ready packed crates, and freight charges.

Samples all sizes given with first order.

J. N. PERKINS, Manager, Syracuse, N. Y.

## PATENT PLANT BED CLOTH.

SUBSTITUTE FOR GLASS ON  
HOT-BEDS, COLD FRAMES ETC.



Equal to Glass Sash, at one-tenth the cost. Protects from Frost; allows healthful ventilation, promotes hardiness and rapid growth; keeps beds warm. Widely known and used all over the United States by florists and gardeners.

Three grades, price by the piece, 3 cts., 6 cts. and 9 cts. per yard, 36 inches wide.

Don't Shrink or Decay rapidly. (Discount on hale lots). Circulars and samples free by mail.

U. S. WATERPROOFING FIBRE CO.,  
56 South Street, NEW YORK.

## GREENHOUSE SYRINGES.

Three New Patterns, Low Prices. Good workmanship. Twenty-one other varieties. Length of Barrel, 18 in.; Diameter, 1½.



No. 10.

No. 10—Conical Valve Syringe, full size, two Spray Roses and Jet. Side attachments.  
No. 11—Open Rose Syringe, full size, two Spray Roses and Jet. Side attachments.  
No. 12—Open Rose Syringe, two Spray Roses and Jet. Side attachments.

These Syringes are made with special reference to those who desire a low-priced working Syringe. Every Syringe we make has our name and address on the Barrel. Manufactured by

ROBT. T. DEAKIN & CO.,  
12th & Buttonwood Sts., Philadelphia, Pa.

## HALES' MOLE TRAP

For destroying ground moles in lawns, parks, gardens and cemeteries. The only PERFECT mole trap in existence. Guaranteed to catch moles where all other traps fail. Sold by seedmen, Agricultural Implement and Hardware dealers, or sent by express on receipt of \$2.00 by H. W. HALES, RIDGEWOOD, N. J.

## BOUVARDIAS.

We offer an excellent Stock of Bouvardias at the following prices:

Per 100  
Single White, Pink, Scarlet, 3-in. pots, ... \$ 7.00  
Extra large bushy plants, ..... 15.00  
Double White, large and bushy, ..... 15.00  
Double Scarlet, ..... \$3.00 per dozen.

DUTCH BULBS, LILACS, &c. at LOWEST PRICES.

Write for Wholesale Prices.

NANZ & NEUNER,  
LOUISVILLE, KY.

## 4,000 SMILAX.

In 3-inch and 2½-inch pots, strong plants, \$4.00 per hundred; \$35.00 per thousand.

ANDREW MEYER,  
3218 S. Jefferson St., ST. LOUIS, MO.

## CARNATIONS.

We offer to the trade very strong plants, including the following varieties:

HINZE'S WHITE, SNOWDOW, DeGRAW, PHILA., PORTIA, LA FRUITE, C. KING, CHESTER PRIDE, &c.  
PER 100, \$10.00.

Address,

BRENNEMAN & PETERSON,  
HARRISBURG, PA.

## CARNATION PLANTS

OUT OF OPEN GROUND, CHEAP.

EDWARDSII, DeGRAW, HENDERSON, SUNSET, PORTIA, CENTURY, HINZE'S WHITE, CRIMSON KING, CHESTER PRIDE.

## VIOLETS.

Clumps of white and Marie Louise.

## ROSES.

La France and Perles in 4-inch pots.

LA ROCHE & STAHL,  
1237 CHESTNUT ST., PHILADELPHIA.

## TO THE TRADE.

## NEW COLEUS.

I offer 12 New Coleus of the finest colorings and markings, grown from seed of my own saving. They are suitable for bedding, having stood the test of our hot summer as well as any variety extant. They will unquestionably become popular from their

BEAUTY, ORIGINALITY and HARDINESS.

Growers would do well to procure one or more sets this Fall to propagate for Spring sales.

PRICE, \$2.00 PER SET OF TWELVE.

Ready September 1, 1887.

E. BAKER,

FLORIST,  
NEW ORLEANS, LA.

E. BENARD,  
ORLEANS, FRANCE.

ROSES ON THEIR OWN ROOTS  
A SPECIALTY.

Nursery stock of all descriptions. For particulars apply to

E. BENARD, JR.,  
Niles, Cal.

## DON'T BUY

A NEW BOILER — until you have full particulars of — BURT'S LITTLE GIANT

Copper Boiler—suitable for dwellings or greenhouses—is simple and economical. No other boiler used in the extensive greenhouses of the inventor.

SEND FOR CIRCULAR.

ALBERT BURT, Florist,

9 Oakwood Avenue,

SYRACUSE, N. Y.



## Slate and Iron Benches.

The erection of slate and iron benches is not nearly so complicated a matter as many suppose and I myself had anticipated. Mr. Robt. Craig is putting his together in a very simple manner. The iron legs are placed on all heart yellow pine blocks (the same material used for posts in constructing the houses), which will last as long as the houses. The top of the bench is fastened to the posts in the side walls with iron hooks, which makes the bench as solid as the house.

The side benches are 37½ inches in the clear, which leaves 1½ inches for drainage, the slates being 12 inches wide. The center table is 8 feet 2 inches wide. The feet of the legs are fastened to blocks as in the side benches, and the top is fastened to the iron posts that support the roof of the greenhouse. This method makes a very simple, neat and strong job. When completed the bench presents a very neat appearance and will last a lifetime. It seems to me that this style of bench is bound to be adopted very largely, as it certainly is by far the most economical in the long run, especially for rose growing and propagating.

W. W. COLES.

A DIFFERENCE.—In our first edition of the "Convention Supplement" a typographical error in the full-page advertisement of Mr. Chas. F. Evans made that gentleman say that "One Philadelphia firm had bought 65,000 plants of the Puritan rose," when the copy stated but "6,500 plants." The error was corrected in later issues, but in justice to Mr. Evans we would state to those who read the first edition, that the FLORIST was responsible for the slight addition of 58,500 plants to the purchase.

## BULBS.

## LILIUM LONGIFLORUM

EXTRA STRONG BULBS.

Per Hundred..... \$ 7.50  
Per Thousand..... 65 00

SAMPLES TO APPLICANTS.

ADDRESS,

R. MAITRE,

7 Camp Street, NEW ORLEANS, LA.

## ROMAN HYACINTHS

FIRST QUALITY ONLY.

\$3.50 per 100, \$30.00 per 1,000.

Our list of Bulbs will be mailed to our regular customers without request.

HENRY A. DREER,

714 Chestnut St.,

PHILADELPHIA.

## BEERHORST &amp; CO.,

SASSENHEIM, (near Haarlem) HOLLAND  
GROWERS OF

HYACINTHS, TULIPS,  
CROCUS, NARCISSUS,  
AND ALL OTHER DUTCH BULBS.  
Catalogue FREE on application.

## FALL BULBS.

HYACINTHS, named and in colors.  
TULIPS, double and single.  
HYACINTHS, Roman.  
NARCISSUS, double and single.  
Lilium Harleli, Lilium Candidum, Lilium Auratum, Lily of the Valley pips and shoots, Freesia, Refracta Alba.  
And other fall planting bulbs. Catalogue free, A. GIDDINGS, DANVILLE, ILL.

THE FALL BUSINESS will open up soon. Read VAUGHAN'S TRADE LIST and order in season; all Fall Bulbs, Hyacinths, Lilies, Tulips, Baskets and supplies; a large stock at bottom prices.

New crop Pansy and Primula seed and Fairy Flowers ready.

J. C. VAUGHAN,

42 La Salle Street, CHICAGO.

My WHOLESALE AND DESCRIPTIVE Catalogues for 1887, of Bedding Plants, Roses, Palms, Orchids, etc., mailed to all applicants. Large stock of the following on hand at cheap rates: *Ampelopsis Veitchii*, various sizes Tea, and Hybrid Roses, all the leading sorts, named *Chrysanthemums*, *Dracæa Indivisa*, various sizes, *Echeverias*, *Small Ferns*, *Geraniums*, double and single, best named sorts, *Areca Lutescens*, in 2½, 4, 5, and 6-inch pots, *Latania Borbonica*, *Scaevola Elegans*, *Orchidæ Folia*, *Corypha Australis*. Other Palms, such as *Cocos Weddelliana*, *Chamærops Excelsa*, *Phoenix Reclinata*, *Phoenix Rupicola*, *Phoenix Tennis*, *Kentias* of sorts. *Glaziovæ Insignis*, fancy named *Clematis*, and other vines, etc. Prices given on application.

WM. C. WILSON, FLORIST,

Steinway's, Astoria L. I.

IT is a conceded fact that there is no better place in the U. S. for Nurserymen to sort up, Dealers to Pack, or Planters to order, than at the Painesville Nurseries, the aim of



THE STORRS HARRISON CO. being to carry a full line of Fruit and Ornamental Trees, Bulbs, Shrubs and Roses. Have a remarkably fine stock of Standard and Dwarf Pears, Kilmarnock Willows and other Weeping Trees; also Grape Vines, including all the Best New Sorts—*Moore's Diamond*, *Empire State*, *Niagara*, *Jessica*, *Frances B. Hayet*, etc. Can supply car loads of elegant, large Nursery-grown Elms, Catalpas, Maples, Poplars, Tulips, etc. The



handsomest lot of Pyramidal Arborvitæ and Irish Juniper ever offered, and acres on acres of other Evergreens. Prices reduced to suit the times. Come and see. Correspondence solicited Catalogue Free. 33d Year. 700 Acres. 24 Greenhouses. Address THE STORRS & HARRISON CO., PAINESVILLE, LAKE CO. OHIO.

THE AMERICAN FLORIST COMPANY'S

## : DIRECTORY :.

OF

FLORISTS, NURSERYMEN AND SEEDSMEN

OF THE

UNITED STATES AND CANADA.

1887.

PRICE ONE DOLLAR.

The most complete and accurate list yet published. The key designates the particular branch of the trade each one is engaged in. The street and number of those living in cities will insure the delivery of tons of catalogues which have hitherto remained dead in the office to which they were addressed. At this low price every one in the trade can afford to have a copy for reference. Address

AMERICAN FLORIST CO.

54 LA SALLE ST., CHICAGO.

**BULBS! IMMORTELES!****J. A. DEVEER,**  
(Formerly of DeVeer & Boomkamp)

Removed to 19 Broadway, NEW YORK.

SOLE AGENT FOR

**THE GENERAL BULB CO.,** Vogelenzang, Holland.  
**LS. BREMOND FILS,** - - Ollioules, France.

PRICES ON

**DUTCH BULBS,**Roman Hyacinths, Paper White and Roman  
Narcissus, Lilium Candidum, Friesias, L. Har-  
risii, Longidorum, etc., for Fall delivery.**NOW READY.****SPIRÆA JAPONICA.**

Per 100

FINE CLUMPS..... \$ 6.00  
LARGE "..... 10.00**E. SHEPPARD & SONS,**

224 Fairmount Street, LOWELL, MASS.

**Freesia Refracta Alba.****LARGE BULBS.**  
**ROMAN AND ITALIAN****HYACINTHS.****NARCISSUS,**  
**DAFFODILS,**  
**HARRISII,**  
**LILY OF THE VALLEY PIPS, &c.**

For the Fall Trade. Prices on application.

**MICHEL PLANT AND SEED CO.,**

718 Olive St., St. Louis, Mo.

**Dutch Bulbs.****R. van der Schoot & Son.****HILLEGOM (Near Haarlem)**  
**HOLLAND.****ESTABLISHED 1830.**  
**GROWERS OF****Hyacinths, Tulips, Crocus**  
**Narcissus, Lilies, Etc.**Intending purchasers, before or-  
dering Bulbs, write us for a  
Catalogue.

Mention Am. Florist.

**AUGUST RÖLKER & SONS,**  
**NEW YORK.**

—Supply the Trade.—

**DUTCH BULBS!**

Catalogues on application.

**C. H. JOOSTEN,**  
**IMPORTER,****3 Coenties Slip, NEW YORK.**

Mention American Florist.

**MRS. J. S. R. THOMSON,**  
Wholesale Grower of Excelsior, Pearl and var.  
Tuberose, Eulalias var. and zeb, Arundo donax  
var., and collector of Zephranthes Atamisco.

Spartanburg, S. C.

We have

**FINE STOCKS**

OF THE FOLLOWING:

**CHRYSANTHEMUMS** In Great Variety.**GERANIUMS** Double and Single, very best kinds.**HELIOTROPES** 6 Fine Kinds.**FUCHSIAS** 10 Best Old Kinds.**FUCHSIAS** 8 Best New Kinds.**Begonia Metallica.** **Abutilon Thompsonii Plena.**Write us if you want any of the above, as all the plants are strong, in fine condi-  
tion and sure to please.**V. H. Hallock, Son & Thorpe,**  
**EAST HINSDALE, NEW YORK.****READY AUG. 15 to 20,**

A large stock of selected

**ROMAN HYACINTHS, LILIAM HARRISII,**  
**FREESIA REF. ALBA,** and a fine line of 15  
varieties forcing Narcissus, dbl. and sgls.**READY SEPT. 1 to 5,****Lilium Candidum,** large bulbs; also a full assortment of  
Dutch Hyacinths, Tulips, Crocus, &c., from the best Holland  
growers. Select florists seeds, Fanny, Primula, Cineraria, &c.

Send for Price List, now ready.

**JAMES KING,**

170 LAKE ST., CHICAGO.

**F. E. McALLISTER,**

—WHOLESALE DEALER IN—

**Seeds** For the Florist  
Market, Garden-  
er and Farmer. **Requisites** Such as Basket, Im-  
mortelles, Grasses,  
Mosses, Boquet Pa-  
pers, Pampas, Plumes, etc  
**Bulbs** For the Green-  
house or Gar-  
den.

22 Dey Street, - - - NEW YORK.

**HERMAN BUDDENBORG,**

WHOLESALE GROWER OF ALL KINDS OF

**DUTCH BULBS AND ROOTS,**Informs the trade that his wholesale catalogue has been mailed, intending purchasers who have not  
received it, should write for one before ordering elsewhere.*Special quotations for large quantities will be given on application, while prime  
quality at the very lowest prices is guaranteed.***HILLEGOM, near Haarlem, - - HOLLAND.****DUTCH BULBS.****BAKKER BROTHERS,****BENNEBROEK (near Haarlem), HOLLAND,**

GROWERS OF

**HYACINTHS, TULIPS, CROCUS,****Narcissus, Spireas, etc,****WHOLESALE ONLY. NO AGENTS.****SMILAX.**10,000 Strings of Smilax for the trade. Steady con-  
tracts solicited.**F. E. FASSETT & BRO.,**  
**Ashabula, Ohio.****Bulbs! Bulbous Roots!****HULSEBOSCH BROS.,****Overveen, near Haarlem, Holland.**The only growers of whose firm there resides a  
member in the States.

Price list free on application. Address

**P. O. Box 3118, New York City.**

Hyacintha, fine mixed, per 100, \$3.00.

Tulips, fine mixed, per 100, \$1.00.

**BULBS! BULBS! BULBS!**Before placing your order for **HOLLAND BULBS**  
write me for my trade list. I have made special  
arrangements with some of the largest growers  
in Holland, and can offer you **TERMS** and  
**PRICES** better than any other firm does. All  
orders over ten dollars will receive a **CREDIT** un-  
til May 1, 1888. Write for terms and prices.**E. HIPPARD, Youngstown, Ohio.****1,500 SMILAX PLANTS**In good, strong, healthy condition at \$5.00 and \$7.00  
per hundred.**F. H. PIRA, LA GRANGE, ILL.**



## Cincinnati.

During the recent hot spell Lou Kyrk was sunstruck, and his absence prevented Frank Huntsman from joining the florists at a dinner.

At a dinner given by the Canoe club a very pretty center piece was a floral canoe made of lilies and rosebuds. It was one of Critchell's designs.

A novel funeral design of Sunderbruch's arrangement was a great cluster of pond lilies—three dozen of them at least—tied with white satin ribbon.

On Tuesday noon, Aug. 23, Frank Huntsman and Miss Hattie Harding of Lockland, a suburb of Cincinnati, were married. They have gone east to spend the honeymoon.

Knights of Labor funeral designs are getting rather common. A very handsome one made by Huntsman was of white and pink asters and Niphetos and Mermet roses.

James Griffith, the manufacturer of wire designs, has moved to 305 Main street, where he has larger quarters, and has doubled his capacity for manufacturing.

Morris Sachs, well known here, is betrothed, and in celebration of the event Sunderbruch made a sack of flowers and tied it with pink ribbon; across the gore the name of his fiancée was traced.

Wreaths are having a popular run just now for funeral work. There was one recently made of ivy leaves and eucharis. Another that attracted considerable attention was of wheat draped with spiraea and dotted with eucharis.

REN HULFORD, JR.

SECOND-HAND tin plate boxes are handy for potting many forcing bulbs.



**TRY DREER'S**  
**GARDEN SEEDS**  
Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free.  
**HENRY A. DREER,**  
Philadelphia



## Florist's Letters

Patent applied for  
These letters are made of the best Immortelles, wired on wood or metal frames with holes to insert toothpicks.

## Prices on Wood Frames:

24-in. Purple... Per 100 \$3.00  
Less than 100, 35c.  
2 1/2-in. Purple... Per 100 \$4.00  
Send for sample. Postage 10c. per 100. Script lettering on Metal Frames any word, 8c. per letter.

## Designs, Monograms, etc.

**W. C. KRICK,**  
1107 Broadway, Brooklyn, N. Y.  
**J. C. VAUGHAN,** Chicago,  
Agt. west of Pennsylvania

## RHODODENDRONS

Being the representatives in the U. S. for Messrs.

## Jno. Watterer &amp; Sons,

The great English Rhododendron growers, we are prepared to furnish Rhododendrons of all sizes and in any quantity, at prices lower than ever before offered in this country. Orders now solicited for spring delivery. Prices on application.

**B. A. ELLIOTT CO.** Pittsburgh, Pa.

## HAMMOND'S GRAPE DUST

## Kills Mildew.

For sample, send stamp to

"**SLUG SHOT**," Fishkill-on-Hudson, N. Y.

## Fall: Catalogues

Printed in a superior manner, with plentiful use of fine cuts of BULBS and other sensible stock, by

## THE FLORIST PRINTER,

Who has long experience and the best facilities.

## CORRECT AND ELEGANT WORK GUARANTEED.

Send for estimates for anything you need, to

## J. HORACE MCFARLAND,

Printer for Nurserymen, Florists, and Seedsmen,  
**HARRISBURG, PA.**

"New York, May 17, 1887. \* \* I am forced to admit that you thoroughly understand the art of Catalogue Printing."  
C. H. JOHNSON.

## INDESTRUCTIBLE BENCHES

Can be made by using

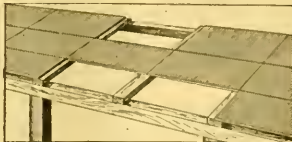
## SLATES

THEY ARE AS

Cheap as Wood

—AND—

Every way Better



They will last a lifetime and you will not be troubled with fungus from rotting wood. They transmit bottom heat better than wood.

Price, \$22.50 for 1,000 sq. feet of surface.

SLATES 1-3 IN. THICK, 20, 22, 24 INCHES LONG.

## AGENTS:

NORTHERN NEW JERSEY, JOHN N. MAY, Summit N. J.  
NEW YORK AND NEW ENGLAND, SIEBRECHT & WADLEY, 409 Fifth Ave., N. Y.  
FROM PITTSBURGH WEST, HILL & CO., Richmond, Ind.  
J. C. VAUGHAN, 42 La Salle St., Chicago.  
CRAIG & BRO., 49th and Market Streets, Philadelphia, Pa.  
CHAS. S. PRICE, Lansdowne, Pa.

## THE GEM OF THE SEASON.

## Bouvardia Sang Lorraine.

The finest Double Scarlet yet introduced, far surpassing Tr. de Nancey, Victor Lemoine, or Thos. Meekins. B. Sang Lorraine makes as fine a truss as the double white, and is an equally vigorous grower.

Per 100  
Plants from 3-inch pots, strong..... \$5.00  
" " 2 1/2-inch " "..... 15.00  
" " 2 1/2-inch " "..... \$100 per 1,000

SMILAX, Strong, from 3-inch pots..... \$5.00 per 100  
TAXUS CUPIDATA, from pots, 1 to 2 feet, 50 cents per foot.

**J. J. HARVEY,**  
RICHMOND, VIRGINIA.

## BULBS! BULBS!

Per 100  
Pseudo Narcissus..... \$ 3.00  
Narcissus Bulbocodium..... 10.00  
Gladolus Colvillei alba..... 13.00  
Single Snowdrops..... 3.50  
Scilla Siberica..... 3.00

Wholesale catalogue containing all Holland grown Bulbs and Roots will be mailed free on application.

## SEGERS &amp; CO.,

BULB GROWERS,  
LISSE, near Haarlem, HOLLAND, EUROPE.

## Sulphur Tobacco Soap.

UNIVERSAL INSECTICIDE  
FOR FLOWERS, TREES, BUSHES, VEGETABLES, AND ANIMALS.

25c Samples by Mail.

## ROSE MFG CO.,

17 So. William St., NEW YORK.

## WE SELL

✽EVERYTHING ✽ FOR ✽ FLORISTS. ✽

Plants, Bulbs, Seeds and Requisites.

If you do not already receive our Quarterly Wholesale Price List, please send name and address and it will be regularly mailed.

## PETER HENDERSON &amp; CO.,

35 and 37 Cortlandt Street, - NEW YORK.

## SURPLUS STOCK.

Per 100  
Everblooming Roses, extra strong, 2 1/2-in. pots, \$3.00  
Fuchsias, ready for 4-inch pots..... 3.00  
Geraniums, a splendid assortment..... 3.00  
I make this offer for Thirty days to make room for fall stock. The above is in splendid condition, and the Fuchsias and Geraniums are in full bloom.

Trade list on application. Address,

**HENRY G. HIGLEY,**  
CEDAR RAPIDS, IOWA.

## NEW COLEUS FOR 1888.

ALL FLORISTS SHOULD HAVE THEM.

Harry Harold and the Mikado..... Pair 25c.  
Tokio and Yellow Jacket..... " 50c.  
Sonsenich and Purple Prince..... " 50c.  
John Goode, the Chicago bender..... each 15c.  
PRICES BY MAIL OR EXPRESS.  
One of each, \$1.00; the lot \$5c. Two of each, \$1.75.  
Price per dozen on application.

**THOS. G. HAROLD,**  
KINGSTON, Somerset Co., MARYLAND.

## SOMETHING NEW.

Our 3-Piece Mailing Box for Florists and Nurserymen.

Our boxes are the pride of the Florists, and are acknowledged by all to be the strongest, yet the lightest and desirably the neatest box made. We will send price list and sample box, FREE.

## SMITH &amp; SMITH,

KENTON, Hardin Co., OHIO.

## TREES

FALL PLANTING.  
We offer the largest and most complete general stock in the U. S., both Fruit & Ornamental, sides many Novelties. Catalogues sent to all regular customers, free. To others: No. 1. Fruit, 10c. No. 2. Ornamental Trees, etc., illustrated. No. 3. No. 3. Strawberries; No. 4. Wholesale No. 4. Roses, Free.

## ROSES

## GRAPE VINES

ELLWANGER & BARRY

MT. HOPE NURSERIES, ROCHESTER, NEW YORK.

## ORCHIDS.

The only Illustrated Catalogue in America  
Devoted Exclusively to Orchids,  
Full of valuable and interesting information  
ON  
CULTURE, HABITAT,  
TIME OF FLOWERING, &c.  
Of the coming florists' flower. Sent for 2 cent  
stamp, by

**BRACKENRIDGE & CO.,**  
GOVANSTOWN, BALTIMORE CO., MD.  
Established 1854.

## ORCHIDS.

20,000.

In all the good flowering sorts, at moderate prices.  
Cut blooms at all seasons.  
Send for catalogue,

**WM. MATHEWS,**  
Utica, N. Y.

## \* FERN. \*

Fine Stock of best varieties for cutting from  
cut flower work. All the best new and old  
varieties of

**ADIANTUMS AND PTERIS.**

**\$8.00 A HUNDRED.**

ALL IN FINE CONDITION.

**GEO. WITTBOLD,**

Wright's Grove, CHICAGO.

## FOR SALE.

25,000 Azalea Indica,  
15,000 Camellias.

Orders for fall delivery now booked. For de-  
scriptive catalogue address,

**C. H. JOOSTEN,**

Importer of Plants, Bulbs & Seeds,  
3 COENTIES SLIP, N. Y.

## 50,000 CUT FERNS.



FANCY.

DAGGER.

From 10 to 15 inches long, of a beautiful dark  
green, used for Bouquet work, filling flower  
baskets, &c., &c. \$1.50 per 1000 Ferns.

## SPHAGNUM

or Packing Moss constantly on hand; long clean  
fiber. Dry or Green.

\$1.00 per bbl. or six bbls. for \$5.00. Bouquet  
Green, \$2.00 per bbl.

**L. B. BRAGUE,**  
HINSDALE, MASS.

## 10,000 ELECTROS.



Send for List of Catalogues.

## ORCHIDS.

The largest stock in America of Orchids  
for Cut Flowers.

## Special Offers.

**SIEBRECHT & WADLEY,**

409 Fifth Avenue,

Rose Hill Nurseries, NEW YORK.

## PALMS.

LARGEST AND BEST STOCK

— OF —

**PALMS for DECORATIVE PURPOSES**

In the world, not excepting Europe:

**PRICES LOW.**

**Siebrecht & Wadley,**

409 FIFTH AVENUE,

NEW YORK.

## STORM KING.

THE FINEST FUCHSIA for RETAILING.

Price, thumb pots..... \$1.00 per doz.; \$5.00 per 100  
3-inch and 5-inch..... 2.00..... 12.00

**OXALIS VARIEBILIS**, large white flowers, on  
strong plants, often two inches across; 20 bulbs pre-  
paid for \$1.00.

Our lock corner mailing boxes are the best, \$30  
per 1,000. Sample 15 cents.

**ELLIS BROS., KEENE, N. H.**

**Hardy American Plants.**

**LILIES, FERNS, BULBS,**

**ORCHIDS, SHRUBS.**

Send for Trade List.

**PRINGLE & HORSFORD,**  
CHARLOTTE, VERMONT.

## PANSIES

AND OTHER SEEDS FOR FALL SOWING

My collection of Pansies has for years attracted a  
great deal of attention; florists and amateurs both  
coveeting them to be of the highest quality.

**OSCAR R. KREINBERG,**  
P. O. Box 294. PHILADELPHIA, PA.  
Write for Price List.

## PANSIES.

**J. Goode Coleus.**

READY AFTER SEPTEMBER 10.

Fine young plants of my pansies which are a  
carefully selected mixture from the best strains  
in the world. Size for planting your cold frames

90 cents per 100, \$7.00 per 1,000.

Fine pot plants of J. Goode Coleus ready any  
time, at

75 cents, 50 cents and 35 cents per dozen.

Price per hundred on application.

**ALBERT M. HERR,**

LOCK BOX 338, LANCASTER, PA.

## CARNATION PLANTS.

Strong and Healthy, Ready Sept. 15th.

Edwardsii, Chester Pride, Fascination, Scarlet Gem,  
Philadelphia Red, Snowdon, Duke of Orange, &c.  
\$6.00 per hundred; \$50.00 per thousand.

Also, 500 Niagara Grape Vines, strong, one year  
old, ready in Nov. or next spring, \$15 per hundred.  
W. R. SHELMIRE, Avondale, Chester Co., Pa.

SOW NOW FOR EARLY FLOWERING IN SPRING.

## Roemer's Pansy Seed.

The Finest Strain of Pansies in the World.

FIRST PRIZES AWARDED WHEREVER EXHIBITED.

Assortment of 18 splendid varieties, 50c. All  
varieties, Finest Mixed, per lb. \$3.00; per oz. 50c.  
Carefully saved only from named EXHIBITION  
FLOWERS, mixed per 10,000 seeds \$4.50; 1,000 seeds 50c.

**Giant Show** (Improved Tricolor), the flowers  
have a diameter up to 4 inches; splendid mixed, per  
oz. \$11.25; 10,000 seeds \$9.00; 1,000 seeds \$1.00; pkt. 25c.  
**Giant Fancy**, very attractive, fine colors, splen-  
did mixed, per oz. \$15.00; 10,000 seeds \$11.25; 1,000 seeds  
\$1.25; per pkt. 25c.

**Giant Five Spotted**. New. The ne plus ultra  
of all varieties; per oz. \$30.00; 10,000 seeds \$18.00; 1,000  
seeds \$2.00; per pkt. 25c.

Full trade offers post free on application.

**FRED ROEMER, SEED GROWER,**  
QUEDLINBURG, GERMANY.

## SPHAGNUM MOSS,

Especially for Florist use, \$2 per bale. Peat \$1.25 per  
bbl., Sheet or Log moss, \$2 per bbl., Pitcher plants,  
a Wisconsin novelty, \$2 per doz.  
Lycopodium in its season at lowest prices per  
bbl. or toa.

Z. K. JEWETT, Sparta, Wis.

## ZIRNGIEBEL'S

IMPROVED: GIANT: TRIMARDEAU.

Seed of that magnificent strain of **PANSIES**  
now ready.

1,000 seeds trade packages at \$1.00 each.

**DENYS ZIRNGIEBEL,**  
NEEDHAM, MASS.

## FOR SALE.

Strong plants of Swanley White violets 75c. per two  
doz.; \$5.00 per 100; \$25.00 per 1,000. Marie Louise, 30c.  
per doz.; \$2.50 per 100; \$20.00 per 1,000. 500 dwari,  
bushy Bouvardias—A. Neipper and other mixed var-  
ieties, in 3-inch pots, \$1.00 per doz.; \$5.00 per 100.  
Double White Hollyhock seed, new crop, 50c. per  
oz.; Double Yellow, \$1.00 per oz. New crop bleached  
Eranthis laxenae plumage, resembles pompas  
plumage, first-class, \$4 per 100, second-class, \$3 per 100.  
M. TRITSCHLER & SONS, Florists, Nashville, Tenn.

## THE BELMONT STRAWBERRY



THE BEST EVER PRODUCED.

TWO FIRST PRIZES 1886.

FIVE FIRST PRIZES 1887

At the June Exhibition of the Mass. Horti-  
cultural Society, Boston.

BUY YOUR PLANTS OF THE INTRODUCERS.

Belmont Pot Plants.....	Per doz. Per 100
Belmont Layer Plants.....	\$1.00 \$4.00
	.75 3.00

ALL OLD Standard Varieties.

Potted plants.....	.50	2.50
Layer plants.....	.30	1.00
Jewell potted plants.....	1.00	4.00
Jewell layer plants.....	.75	3.00

Send your address now for Illustrated Catalogue of

**DUTCH BULBS,**

For Winter Flowering. SENT FREE.

OLD RELIABLE SEED AND

Agricultural Warehouse  
**PARKER & WOOD.**

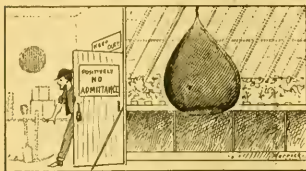
49 North Market St., BOSTON.

Mention American Florist.



## The Man With a Secret.

The days of secrets in the trade are gone. Still occasionally you will find some moss-back carefully guarding some old chestnut of a method of culture under lock and key. It matters not that his "secret" method has been long since tried and discarded



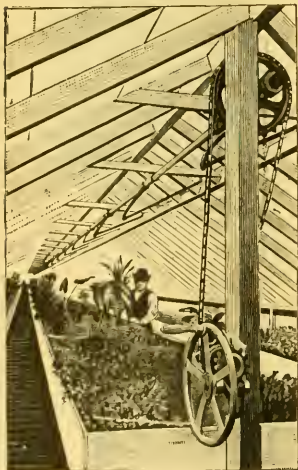
THE MAN WITH A SECRET.

**NOTE BY THE ARTIST.**—The huge object in the greenhouse is not intended for a canvassed ham but for a "chestnut," and the spot upon its side for a worm hole which the worm had neglected to pull in after him.

by more advanced cultivators, and that it was years ago spread broadcast over the land through the horticultural press. He seldom reads, hence he is not aware of the fact and he still rests under the impression that he will carry his "secret" with him to the grave.

The man with the "secret" seldom has a prosperous appearance, strange as it may seem. His "secret" does not seem to profit him, though he is holding it for nothing but profit. He spends so much time guarding it that legitimate methods suffer. He is certainly entitled to our sympathy, and for him here we drop a large sized tear (\*).

## Challenge Ventilator.



Without a rival either in Cost, Speed in operation or Security in case of storms.

**No Liability to Break or get out of order.**  
Simple in construction, perfect in operation. Parties wishing estimates will be cheerfully furnished with the same on application. In all cases, please give the following dimensions:

- 1st. Give the length and depth of sashes.
  - 2d. Number of sashes to be lifted.
  - 3d. The length of the house.
  - 4th. The height from the walk to comb of the roof.
- For estimates, prices, or further information, address,

**QUAKER CITY MACHINE WORKS,**  
RICHMOND, IND.



FOR THE TRADE.  
**FLORAL WIRE DESIGNS.**  
**JAS. GRIFFITH,**  
THE :: PIONEER :: MANUFACTURER :: IN :: THE :: WEST,  
305 Main Street. CINCINNATI, OHIO.  
SEND FOR WHOLESALE PRICE LIST.

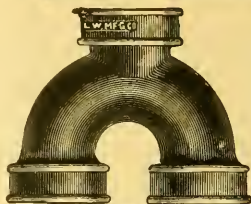


## Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.



**L. Wolff Mfg. Co.,** 93 to 111 W. Lake St. CHICAGO

ESTABLISHED 1828.

**Greenhouse Pipe,**

**FITTINGS**

— AND —

**VALVES,**



**Fountains,**

**VASES,**

**SETTEES,**

ETC., ETC.

**STABLE FITTINGS.**

**THE J. L. MOTT IRON WORKS,**

88 & 90 BECKMAN ST.,  
NEW YORK.

307 & 309 WABASH AVE.  
CHICAGO.

**SASH BARS** MADE OF CLEAR CYPRESS LUMBER.

Equal to Red Cedar in durability. Plain Bars  $1\frac{3}{4} \times 1\frac{1}{4}$  inches kept in stock. Price 2 cents per lineal foot. F. O. B.

Lockland Lumber Company, Lockland, Hamilton County Ohio.

**Ives' Putty Machine.**

Patented Jan. 8, 1897.

The best device ever invented for laying putty. With this you can make old leaky sash perfectly tight without removing the glass. It will do the work of five men in bedding glass.

Sent by Express on receipt of price, \$2.50.

**J. H. IVES, DANBURY, CONN.**

**M. M. BAYERSDORFER & CO.**

56 N. 4th Street, Philadelphia, Pa.,

Manufacturers and Importers of

**Baskets & Florists' Supplies**

**NEW CATALOGUE READY,**

and sent free on application.



ALL SIZES OF SINGLE AND DOUBLE THICK

**GLASS FOR GREENHOUSES.**

ALL GLAZIERS' SUPPLIES.

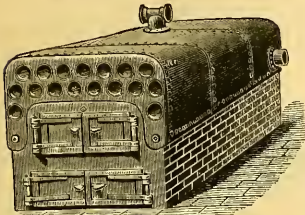
Write for Latest Prices.

ESTABLISHED 1854.

## Devine's Boiler Works

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers.



Capacity from 350 to 10,000 feet of four-inch pipe.  
Send for New List.

PETER DEVINE,

387 S. CANAL ST.,

CHICAGO.

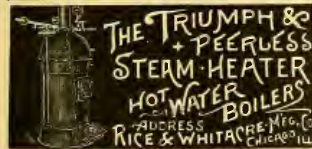
ESTABLISHED, 1866.

Floral Wire Designs,

Manufactured by

N. STEFFENS,

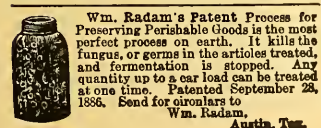
335 East 21st Street, - NEW YORK.



Delegates to the next convention will travel via the Pullman Car Line

TO AND FROM Louisville, Indianapolis, Cincinnati and the winter resorts of Florida and the South. For full information address

E. O. McCormick, Gen. Passenger Ag't, Chicago.



## Greenhouse Heating AND Ventilating

HITCHINGS &amp; CO.

233 Mercer Street, New York.

Ride Patterns of Boilers,  
Eighteen Sizes,

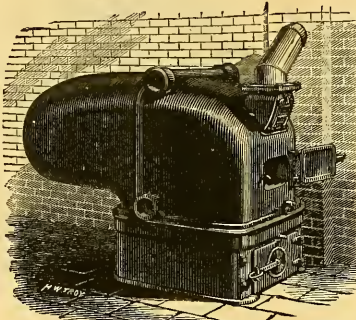
Corrugated Ride Box Boilers

Saddle Boilers,

Conical Boilers,

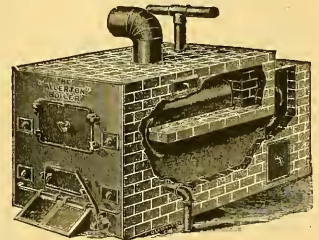
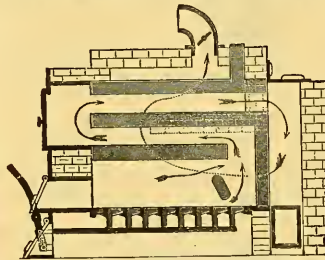
Base Burning Water Heaters

Perfect Sash Raising Apparatus.



Send 4 cents postage for Illustrated Catalogue.

## GREENHOUSE HEATING APPARATUS.



THE "ALLERTON" BOILER.

## WROUGHT WELDED BOILERS

— WILL NOT CRACK LIKE CAST IRON. —

— NO SEAMS OR RIVETS TO BECOME LEAKY. —

SEVEN PATTERNS.

FORTY-SIX SIZES.

Suitable for Hard or Soft Coal, Gas-Coke or Wood.

Greenhouse pipes and fittings with improved rubber ring joints as used in England, by which a perfect joint can be made in one minute and at half the cost of the old-fashioned calked joints.

## \* GOLD AND SILVER MEDALS. \*

Awarded to our Boilers at London, Paris, Brussels, Berlin, Manchester, Birmingham, &c., after actual working tests against all comers.

Write for Catalogues.

## ECLIPSE MANUFACTURING COMPANY,

125 South Clinton Street, near Monroe,

CHICAGO, ILL.

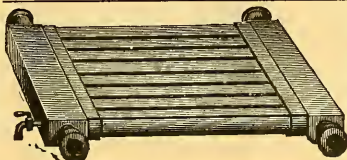
## DICK'S HOT WATER GRATES

Are more economical in fuel and will last THREE TIMES as long as the solid grates; they can be used in connection with Hot Air Flues. Send for circular of

TUBULAR SADDLE BOILERS AND GRATES'

TO JOHN DICK, JR.,

273 South 11th St., Philadelphia, Pa.





## Index to Advertisers.

Advertising Rates, etc.	45
Allen, W. S.	45
American Florist Co.	43
Baker, E.	28, 47
Baker Bros.	49
Baller, F. A.	28
Bayesdorfer, M. M. & Co.	52
Beach & Co.	29
Beatty & Co.	29
Bentley, T. & Co.	47
Bernard, E. J.	23
Bishop, Wm. R.	32
Blanc, A.	51
Bock, Theo.	43
Blackledge & Co.	51
Brague, L. B.	51
Brenneman & Peterson	47
Burt, Albert.	47
Brown & Canfield	40
Butz, Paul & Sons.	47
Buddenburg, Herman	49
Burgelin, P. G.	28
Cassel, Jacob C.	29
Chandler, B. B.	28
Clark Bros.	28
Carmody, J. D.	30
Critchell, R. F. & Co.	43
Crohn, Robt. T. & Co.	49
De Veer, J. A.	49
Devine, Peter	30, 53
Dick, John Jr.	28
Dillon, J. L.	28, 45
Dreier, H. A.	30, 32, 48, 50
Eames, H. W. & Co.	28
Elipse Mfg. Co.	53
Elliott, B. A., Co.	43, 50
Ellis Bros.	49
Ellwanger & Barry	50
Evans, Chas. F.	51
Exeter Mach. Wks. Co.	30, 34
Fassett, F. E. & Bro.	49
Galagher, M. F.	28
Gartfield Park Rose Co.	43
Gasser, J. M.	54
Germund, W. C.	43
Giddings, A.	30, 48
Griffin, Jas.	52
Growlage, Henry J.	47
Hales, H. W.	47
Halliday, R. J.	28
Hallack & Thorpe	47
Hammond & Hubert	45
Hammond's Slug Shot	29
Harold, Thos. G.	50
Hartey, J. J.	49
Henderson, P. & Co.	30
Herr, Albert M.	32, 51
Higley, Henry G.	47
Hill & Co.	43
Hippard, E.	49
Hitchins & Co.	52
Hooker, H. M.	34, 52
Hulsebosch Bros.	49
Ives, J. H.	49
Jansen, Ed.	29
Jewett, Z. K.	51
Joosten, C. H.	49
Keyes, John	49
King, James	29, 49
Krick, W. C.	49
Krienberg, Oscar R.	51
Kuohn, C. A.	30, 53
Lafache & Smith	45, 47

Lawrence, R. F.	32
Lockland Lumber Co.	29, 52
McAllister, F. B.	49
McFarland, J. Horne	49
Maitre, R.	48
Marschütz & Bucha-	29
rich	51
Matthews, Wm.	49
Meyer, Andrew	28, 47
Michel Plant & Seed Co.	49
Miller, Geo. W.	43
Monon Route	52
Mott, J. L. Iron Wks.	52
Mullen, Geo.	28, 45
Myers & Co.	54
Nanz & Neuner	33, 47
Oelschig, A. C.	29
Parker & Wood	49
Perkins, John J.	45
Perkins, J. N.	47
Peters, C. A.	43
Pira, F. H.	49
Plenty, Josephus	47
Price, Charles S.	49
Pringle & Horsford	51
Quaker Machine Wks.	52
Radum, Wm.	53
Rice & Whitacre Mfg.	53
Co. & Co.	53
Roemer, Frederick	51
Rolker, Aug. & Sons	49
Ross & Millang	45
Ross & Millang	45
Saul, John	54
Schulteis Bros.	51
Schulz, Jacob	53
Scollay, John A.	54
Segers & Co.	54
Sheppard, E. & Sons	49
Shelmer, W. R.	51
Sheridan, W. F.	53
Siebrecht & Wadley	51
Situations, Wants etc.	28, 43
Smith, C. A., Floral Co.	29
Smith & Smith	40
Steffens, N.	53
Stewart, Wm. J.	45
Storrs & Harrison Co.	58
Strauss, C. & Co.	45
Teas, E. Y.	28
Thomson, Mrs. A. R.	49
Thorburn, J. M. & Co.	33
Trischler & Sons	51
Udo, J. W.	49
U. S. Waterproofing	49
Flue Co.	47
Van der Schoot, R. & Son	49
Vander, J. C. & Co.	45, 48
Vare, Thos. S.	33
Waterer, H.	33
Weathered, Thos. W.	54
Weich Bros.	45
Willidin Pottery Co.	47
Wittall, Frank & Co.	54
Wilks, S. Mfg. Co.	54
Williams, H. W. & Sons	29
Winn Bros.	53
Wilson, Wm. C.	48
Witbold, Geo.	52
Wolf, L. Mfg. Co.	49
Wood, I. C. & Bro.	43
Yonge, Thos. Jr. & Co.	45
Zirngel	41



Sectional View.

Mention American Florist.

## IMPROVED BOILERS

FOR HEATING

## GREENHOUSES

GRAPERIES, POULTRY-HOUSES, ETC.

ALSO FOR HEATING

WITH HOT WATER UNDER PRESSURE.

## VENTILATING APPARATUS

For Raising Sashes in Greenhouses.

## GALVANIZED SCREW EYES

And Wire for Trellis Work.

Send for Catalogue.

Thos. W. Weathered,

46 &amp; 48 MARION ST., N. Y.

## HEATING APPARATUS

FOR

## Greenhouses, Etc.

CAST IRON PIPE AND FITTINGS.

JOHN A. SCOLLAY,

74 &amp; 76 Myrtle Ave.,

Brooklyn, N. Y.

## Improved Hot Water Boilers

For Heating

## Greenhouses, Graperies,

CONSERVATORIES, ETC.

ALSO

Cast Iron Pipe, Fittings, Valves and

all Material for Heating by

Hot Water.

Send for Catalogue.

MYERS &amp; CO.

1173 So. 9th St.,

PHILADELPHIA.

## GREENHOUSE HEATING

BY STEAM, BY HOT WATER, BY COMBINATION STEAM AND WATER.

EXETER MACHINE WORKS,  
19 FEDERAL ST., BOSTON, MASS. WORKS-EXETER, N. H.THE CELEBRATED  
WILKS WATER HEATER!

For Heating

GREENHOUSES,

DWELLINGS,

POULTRY HOUSES,

STORES, BATH TUBS,

ETC., ETC.

Send for Price List.

S. Wilks Mfg. Co.,

Cor. Monroe &amp; Clinton Sts., Chicago.



J. M. GASSER'S

## PAT. ZINC JOINTS

For Butting Glass without Laps.

Makes it air and water tight. No breakage from frost. Saves fuel and glass.  
FLORISTS: WATCHMAN for Flues and Hot Water, \$15.00 for Steam, \$5.00. It will ring a bell when the temperature changes, and ring when the steam goes down.

J. M. GASSER.

71 Euclid Ave. - CLEVELAND, OHIO.

Mention American Florist.

A HANDSOME gold watch was presented to the retiring president of the society. Mr. Robt. Craig, and a diamond pin to his wife.

PORTLAND CEMENT.—Will some reader of the FLORIST tell me the proper proportions of Portland cement and sand to use in making cement walks? A. C.

## ORCHIDS RARE PLANTS, &amp;C.

A very large stock of choice East India Orchids, viz.: Phalanopsis, Renanthera, Saccolabium, Eriose, Cyrtopodites, Dendrobium, etc. Also Central and South American Orchids, as Cattleyas, Loddiges, Lycastes, Oncidium, Odontoglossums, well-grown plants, and at as low rates as it is possible to offer these fine sorts.

## NEW AND RARE PLANTS,

A large collection of Hothouse and Greenhouse plants, which are carefully grown, and offered at low rates.

## DUTCH BULBS.

Large importations direct from the leading growers in Holland; first quality bulbs. Catalogues on application.

JOHN N. SAUL, WASHINGTON, D. C.

-FOR-

## PAMPAS -- PLUMES

ADDRESS THE GROWER,

J. W. UDE, Santa Barbara, Cal.,

-OR-

A. VIRGIEN, P. O. Box 319, New York City.

# THE AMERICAN FLORIST



MASSACHUSETTS  
AGRICULTURAL  
COLLEGE

*America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."*

Vol. III.

CHICAGO AND NEW YORK, SEPTEMBER 15, 1887.

No. 51.

## THE AMERICAN FLORIST

Copyright, 1887, by American Florist Company.  
Entered as Second-class Mail matter.  
Published on the 1st and 15th of each month by  
THE AMERICAN FLORIST COMPANY.  
GENERAL OFFICES, 54 La Salle Street, Chicago.  
EASTERN OFFICE,  
Room 81, Vanderbilt Building, New York.

All communications should be addressed to the  
general office at Chicago.

SOCIETY OF AMERICAN FLORISTS.—E. G. Hill,  
Richmond, Ind., president; John N. May, Sum-  
mit, N. J., vice-president; M. A. Hunt, Terre  
Haute, Ind., treasurer; Wm. J. Stewart, 67 Brom-  
field street, Boston, Mass., secretary. The fourth  
annual meeting at New York, Aug. 17, 18, 19,  
1888.

### The Future of the National Society.

BY ALFRED E. WHITTLE.

No doubt there are many florists who think the same as does one of the delegates to the Chicago meeting, and believe that because no direct pecuniary benefit results from being a member of the S. A. F. and attending the meetings of the society, that the expenditure incurred by so doing is useless and unnecessary.

Such men are *one* with all those who in every age have opposed and attempted to retard progress and development. It is useless to argue with them. They cannot be made to see that all ideas must enter the mind through the right use of the perceptive faculties that are given to men. These faculties are aroused and stimulated by the assembling together of kindred minds. A few words spoken may be the means of throwing light upon some subject that has long been a mystery to some of the number. Be a man ever so intelligent and persevering, it will always be found that others can help him considerably in the gleaning of knowledge. Some idea will be expressed, some statement made which will at once bring out some reply. If there had been no discussion, this interchange of opinions would have been wanting. Some may say: "I can gather all the information without the expense of the journey, simply by reading the report of the society." Action of this nature cannot be commended, for if all were so selfish, then no meeting could possibly be held. To acquire, without being willing to contribute to the general store, is ungenerous and unmanly.

He who states that mingling with progressive and enlightened florists will not enable him to sell a ten-cent bouquet, is surely very limited in the scope of his ideas. The man who never leaves his native village, and whose horizon is bounded only by the fields he cultivates, would never be progressive in his methods, but would tread from year to year in the steps of his ancestors. If there is a

newer and better way of making even a ten-cent bouquet, it behooves every wide-awake florist to know of it. To feel that one is behind the age, groping along miles behind his rivals, is certainly a most galling thought to many minds.

There were men at the Chicago convention thoroughly versed in the specialties for which they are famous. It is safe to assert that in their particular line no man at that meeting was competent to teach them anything. Why, then, did they attend? Surely they did not expect to be instructed in the cultivation of roses and bulbs, or to be taught how to conduct their large businesses. Yet if these men were asked if they received benefit from their trip, each one would answer "Yes." They fully understand that mutual intercourse broadens thought and develops intellect; that no man unless he travels and observes can ever expect to retain his position as a leader.

Governed by the same slow and unprogressive spirit are also those who attend meetings, but instead of taking part in the proceedings, only predict failure to the undertaking. "It can never succeed" is a statement often made respecting every enterprise, but we may be sure that the heart of the person who makes this assertion is not interested in the matter. Let thoughtful perseverance be applied, and there is no work that cannot be made a success. Criticism is invited as to all work of the S. A. F., but let the criticism be given with the view to improvement, and not in the spirit of carping indifference. There is a glorious future before our society. Many of the members are enthusiastic workers, and they are also men who show by their success in our business that they are skillful cultivators and intelligent observers. The years to come will show that those florists not with us are content to remain inactive while others are advancing and crowding to the front.

Next year will be the golden opportunity for New York and other eastern states to prove to the west that the claims which we have made are substantiated by facts. The grandest exhibition of cut flowers ever seen on this continent could be given in the metropolis, and it would not be too much to say, in the world. The skilled growers living in the vicinity of New York, Philadelphia and Boston excel all competitors in the growing of cut flowers for market. Let every one of them become interested and decide now as to what they could exhibit at the meeting of the convention in 1888. Many flowers from each one would not be needed. Quality more than quantity would be the desideratum. Not only flowers but plants also could be given a prominent place. Retail florists should be induced to exhibit designs illustrative of their skill and ability. All that is needed to make such an exhibition an

overwhelming success is to interest the men who are competent to exhibit. The leading florists of Europe might be invited with confidence to view our products, if only the florists of this section would become zealous in this matter. What a show we could make! Surpassing anything of the kind ever before attempted. The florists of the continent, hearing of the efforts put forth, would troop in large numbers to the display. A convention of such magnitude would command the respectful attention not only of the daily press of New York, but of the public in general, and a greater impetus would be given to the florist's business than it has yet received.

But it is one thing to talk, and another to execute. To successfully carry out this project means work—hard work for some. But New York must do her best, and expenditure of neither time nor money should deter her florists from showing the world her capabilities. Men love to follow a crowd. Make the next convention a success, and numbers will be ready to join the ranks of the society. But let it be a failure, and we may as well give up all hope of ever making the S. A. F. the representative society. Success, then, depends entirely upon the efforts put forth by the New York florists and their neighbors. If the majority become awakened to the importance of the cause, there is no doubt but that all will do their part, and when this co-operation is effected success is insured at once.

### Cutting Roses.

Mr. Chas. Anderson touched the right string when he stated at Chicago that different roses require different soils and different treatment. Any observant man accustomed to roses must have noticed the varied characteristics of those kinds that are generally forced under glass. No two are alike, either in their habit of growth or habit of flowering. The wise man will notice these peculiarities and will adapt his methods to the different requirements.

This thought suggests the advisability, as far as practicable, of every grower cutting his own roses. Going over the plants three or four times each day enables the manager to ascertain the exact condition of his stock more accurately than in any other way. Spider is seen at its first appearance, and the man who is syringing is at once directed to check its ravages. Likewise mildew is manifest immediately the plants are attacked, with the result of its speedy removal. The condition of the soil can be constantly watched, and water diminished or increased as needed. Not only does this work enable the grower to control completely the cultivation of his roses far better than by any other plan of observation, but it is also a means whereby the



standard of his bloom is kept near the maximum. Nothing pertaining to fine roses is of more importance than the cutting. So much depends upon how the flowers are cut as to their future value upon the counters of the retail dealers, and as different varieties need different periods of cutting, this work should be delegated, if the best results are to be obtained, only to skilled hands. This may be considered a matter of minor importance by some, but from long observation I am convinced that thousands of flowers are injured by wrong methods of cutting; some are cut too early, some too late. This is another point in which no rule can be laid down. Cut *Bon Silene* in the bud, and it is all right; but cut *La France* too tight, and a perfect flower is never obtained; or let a *Perle* open as far as a *La France* before cutting, and its after value will be small. So with all the others; each has its special growth and special flower. Therefore to be successful in the cultivation of roses demands a constant vigilance, in order that an intimate acquaintance with all the varied peculiarities may be obtained.

A. E. WHITTLE.

#### *Eucharis Amazonica*—How to Flower them Successfully.

BY H. A. SIEBERG.

One essential is to have good strong bulbs; they should be not less than five to six inches in circumference. Many disappointments arise from endeavoring to flower weak bulbs which have been purchased in pots, were well dressed in foliage, and presented a favorable appearance, the purchaser taking it for granted that so long as he bought *eucharis* plants, he would soon have a crop of flowers. Do not waste space and time on small bulbs. Buy only strong, matured, dormant bulbs in fall or spring; these can generally be purchased for \$20 to \$25 a hundred.

If to be planted on a bench or table, select a place where you can give them plenty of bottom heat in winter; a shady side or end of a tea rose house is a good place. Have the bottom of the bench arranged to give ample drainage; lay sod, grassy side down, over the cracks, and fill in with good rich soil prepared as follows: To three parts of rotted sods add one part of well-rotted manure and one part of sharp sand; with this mix a half peck of ground bone and the same of air-slaked lime to each barrel of soil. Place this on your table to the depth of four inches—or five inches for extra strong bulbs—and plant your bulbs about six inches apart each way, allowing the neck of the bulb to protrude above the surface. Plant firm, and after planting give them a good soaking; afterwards water only when the soil requires it until after the leaves or flower stalks begin to move; when this is noticed you may know that the bulbs are rooting, and water more freely, though still carefully.

The first flowers will be but little more than half size, but don't be discouraged, as you are only growing and establishing your bulbs. After two or three good leaves are developed on each bulb you may gradually withhold water from them beginning at one end, to stop growth and ripen your bulbs. If you have a large quantity you can grade them and ripen them off in succession when the foliage appears flabby and wilted, but do not dry up or kill the leaves entirely. Then begin watering again, sparingly at first. Keep up heat as even as possible even when resting; they can stand 70°

to 90° bottom heat and do well. As growth becomes stronger a strong mulching or feeding with liquid manure will greatly assist in developing handsome flowers.

In this way *eucharis* may be had in bloom the year round, securing three crops of bloom from the bulbs—one in August or September, one about the holidays, and another about Easter, providing they are well cared for and properly rested. While growing syringe freely, and with tepid water if possible. They can be left on the same bench without change for three years if well fed at growing periods.

#### Propagating Alternantheras.

BY C. STROMBACK.

Our method of propagating the large quantities of *alternantheras* which we use yearly in the bedding here is as follows: For *paronychioides* major and *versicolor* we take cuttings from bedded plants about the middle of August and place in a propagating frame—which is simply a cold frame with two inches of sand in the bottom—where they root readily, if given proper attention. After the cuttings are rooted they are potted in rose pots, three cuttings to a pot, and then half-plunged in another frame, being set in in rows an inch apart, the pots touching in the rows. Rose pots are preferred as giving considerable root room while at same time economizing surface space. A thousand plants can in this way be placed under the usual 6-foot sash, and may remain here until October, when they should be removed to the greenhouse for the winter.

About the latter part of March the plants are separated and potted singly in the same size pots; in these they remain until used in the spring. We find that when these two varieties are propagated in winter the cuttings will root satisfactorily, but will not make a good growth, while the method described always insures an abundance of good plants.

*Alternantheras amena* and *aurea* are handled differently. Stock plants are kept over from the year previous, and in August or September potted up into 3-inch pots and grown on for cuttings to be struck in December. If short of stock plants we pot up plants from the beds in the fall and use cuttings from these in same way. When rooted, the cuttings are potted, three in a 2½-inch pot, and separated in March as with the other varieties. During the winter the plants form roots, and in spring the growth is rapid. About the middle of March or first of April the plants of all varieties are moved out into hotbeds to make room in the houses.

Lincoln Park Greenhouses, Chicago.

#### Propagating Alternantheras.

At the South Park greenhouses, Chicago, Superintendent Kanst keeps up his stock of all *alternantheras* except *paronychioides* major, in the following simple manner: In the fall after the first frost the plants which have been in the fancy beds during the summer are taken up, the tops sheared off with sheep shears and carted to the greenhouses, where they are wintered over in 3-inch pots, frequently being stowed away under benches, thereby taking up but little useful space. In the spring these plants are pulled apart into five or six pieces which are potted singly in 2½-inch pots, and make good strong plants ready for bedding in six weeks from the time they are

separated. Mr. Kanst says he can depend upon securing six young plants from each old one, and takes up in the fall 500 old plants for each 3,000 new plants that he will require in the spring. In March or April the young plants are removed to hotbeds where they remain until wanted for bedding; making their growth from March to May.

A. *paronychioides* major is propagated from cuttings in August and September, potted three or four in a 2½-inch pot, carried over in the greenhouse till March then divided, and potted singly, and soon after removed to hotbeds.

#### Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1886.

Sept. 16—Tem., morning 71°, noon 69°, evening 65°. Wind S. Put in cuttings of *heliotrope* and *pyloneas* in propagating house. Potted *coleus* and *achyrantes* from propagating frame. Arranged in palm house the plants taken in from No. 1 and outside.

17—Tem. 48, 63, 54. NW. to S. Propagated in the house *lobelias*, *cupheas*, double *alysiums*, *nierembergias* and *gnaphaliums*. Repaired roof of conservatory. Potted *Eucalyptus globulus*; transplanted winter *begonias* into 4-inch pots and placed them in No. 5.

18—Tem. 47, 70, 67. S. to SSE. Continued transplanting winter *begonias*. Commenced plunging on bench in No. 3 young plants of *Alternanthera paronychioides* major from frame yard, first cleaning and nipping the plants. Continued work on conservatory roof.

19—Tem. 52, 63, 58. W. Sunday.

20—Tem. 50, 65, 55. W. to S. Commenced propagating *geraniums* *Mad. Saleroi* and *Rev. Atkinson*. Continued plunging young plants of *Alternanthera par. major* on bench in No. 3.

21—Tem. 55, 64, 62. S. Put in cuttings of *geraniums* *Gloire de Carbonais* and *Clement Boudart*. Finished transplanting winter *begonias*. Commenced transplanting *primulas* into 3-inch pots, placing them in No. 5. Arranged conservatory.

22—Tem. 60, 75, 69. S. to SW. Put in cuttings of *geraniums* *Excellent* and *Master Christine*. Continued transplanting *primulas* into 3-inch pots and plunging *Alternanthera par. major* on bench in No. 3.

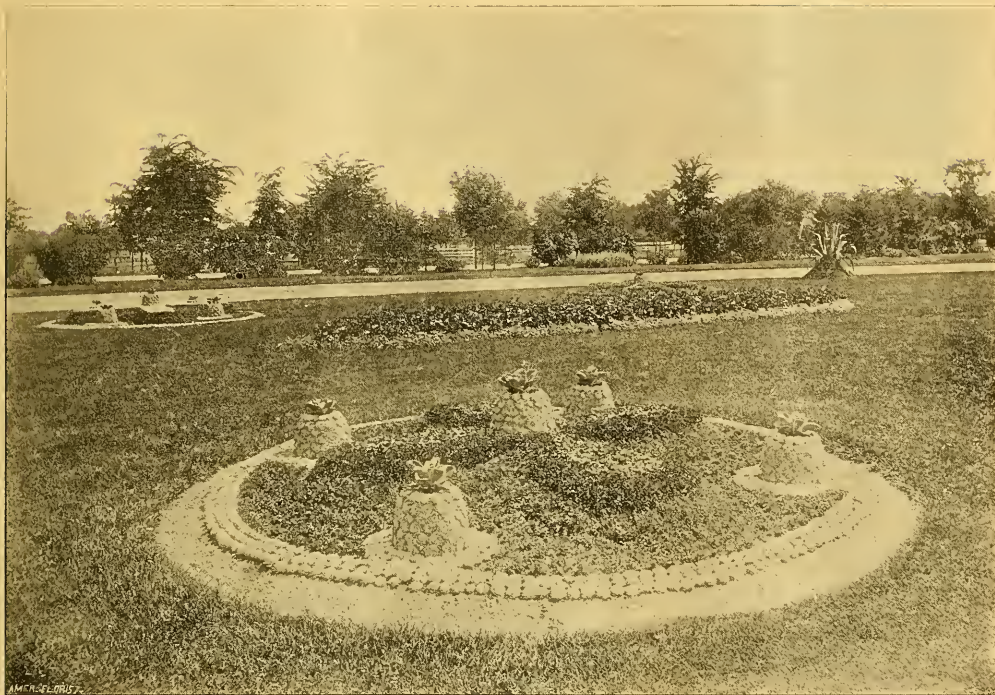
23—Tem. 64, 80, 71. N. to SE. Put in cuttings of *geraniums* *Clifton* and *Queen of the West*. Transplanted Chinese *primulas*. Continued plunging young plants of *Alternantheras par. major* and *versicolor* on bench in No. 3.

24—Tem. 70, 85, 78. SW. Put in cuttings of *geranium* *Ralph*. Plunged on bench in No. 3 young plants of *Alternanthera versicolor*.

25—Tem. 70, 84, 72. SW. to SE. Put in cuttings of *geranium* *Wonderful*. Potted from propagating frame rooted cuttings of rose *geraniums* and plunged them in cold frame. Finished cleaning, nipping and plunging young plants of *alternantheras* in No. 3.

26—Tem. 70, 67, 68. SW. to NE. to SE. Sunday.

27—Tem. 67, 77, 65. SE. to NW. Wheeled tan bark from frames into a separate frame for spring use. Put in cuttings of *geraniums* *Emilie de Girardin* and *Pres. Leon Simon*. Potted *alysiums* from propagating frame and plunged them in other frame. Replaced *Cineraria hybrida* in frames to give them more room, considerable growth having been made.



ELEVATED BEDS AT SOUTH PARK, CHICAGO.

28—Tem. 53, 62, 52. NW. Put in cuttings of geraniums Ernest Lauth, Dr. Jacoby and Dell. Removed poinsettias from frame yard into house for winter.

29—Tem. 41, NW., clear; 61, WSW., clear; 58, SW., clear. Put in cuttings of geraniums Guillaume Mangelle and Mad. Thibaut.

30—Tem. 54, 55, 43. SW. to NW. Put in cuttings of geraniums Iago, Sapeur Pompier and Earl Roslin. Arranged tool shed. Stored shading rolls.

#### Obituary.

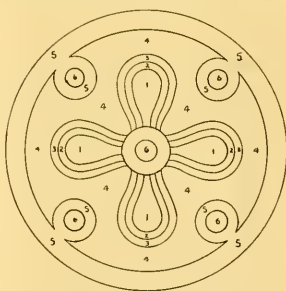
ERASTUS BONNER.—It is with deep regret that we record the death of Erastus Bonner, the senior member of the firm of E. Bonner & Co., Xenia, O., which occurred Sept. 1, at his home, from disease of the kidneys.

Mr. Bonner was present at the recent Chicago convention, and was apparently in the best of health at that time, and this announcement will undoubtedly be read with painful surprise by his many friends and business acquaintances who have so recently seen him in the full possession of health.

Mr. Bonner was born in Xenia, Nov. 14, 1827, and has lived all his life in that city. He was most favorably known throughout the west by the trade, being a most courteous gentleman, of strict integrity in his business dealings. His widow and sons will continue the business under the old firm name.

#### Elevated Bed at South Park.

The view on this page is the first of a series of illustrations of the bedding seen in Chicago parks this season.



#### KEY TO THE DIAGRAM.

1. *Alternanthera versicolor*. 2. *A. paronychoides major*. 3. *Othonna crassifolia*. 4. *Oxalis tropaeoloides*. 5. *Echeveria secunda glauca*. 6. *Echeveria metallica*.

#### Nameless Beauty Rose.

When I first saw this rose, lately introduced from Germany and called "Namenlose Schöne" for want of a better name. I thought I recognized an old ac-

quaintance by the foliage (the rose was not then in flower).

I purchased some plants this season and they are just coming into bloom, and they are without doubt identical with a rose which I have grown for three or four years, and which when discovered was labeled "La Sylphide," the original stock of which I purchased several years ago. They are not *La Sylphide*—that is certain—for the foliage is entirely distinct, though the flowers have certain points of resemblance. I had thought it asport from the above mentioned variety, and did not propagate from it, as I did not see any reason why it should be introduced as a new variety when we already have too many varieties without especial merit, and have "weeded out" from my stock the four 2-year-old plants that I had last season.

It certainly does not possess a tithe of the merits of the hybrid perpetual rose, *American Beauty*, which our German friends have tried to convince us was an old variety under a new name, and which our own florists have well nigh exterminated by trying to force as a tea or monthly rose what is really a hybrid perpetual, scarcely as free flowering as some others of that class, such as Captain Christy.

R. W. HAGARDINE.  
Felton, Del.

DANVILLE, ILL.—A. Giddings has made some important improvements in his establishment this season, making it now one of the largest in eastern Illinois.





The Summer Propagation  
of Roses, with a List of Best  
Varieties.

BY E. G. HILL  
Read before the Chicago Meeting.  
CONCLUDED.

We have gone through the list of best roses, now let us reverse the matter and ask, why grow Mme. Bravy, Mme. L. Ferrier, Mme. Denis, Lady Warrender, Mme. Villermoz, Cornelia Cook, Bella, Mlle. Rachel, Souv. Geo. Sand, Tr'id Milan, when The Bride, Marie Guillot and Sombreil combine more good qualities than are to be found in the whole list of white varieties mentioned.

Among pink varieties, commencing with Adam, Camille Raoux, Marquerite Ramet, Flavian Budillian, Rose Nabbonand, Bongere and Le Florifere, all the good qualities of these varieties may be found in C. Mermet, La France or Sou. d'un Ami. Among red varieties, the best known are Duchess of Edinburgh, M. Chabaud, St. Mandrier, Alph. Karr, Mme. Brest, Mme. Vetry, Aline Sisley, Gen. de Tartas, Regulus, Sou. C. St. Pierre, Dr. Lisnard and Papa Gontier; we think that Duchess of Edinburgh and Papa Gontier might be profitably grown to the exclusion of the other red varieties mentioned.

But it may be objected that at this rate we would lose some of the most distinct types running through our everblooming roses: it is well to be careful on this point for types in roses exist as definitely as do facial expressions, color of hair, and other characteristics in the human races; then to avert any loss on this score, let us select the best and most pronounced in the different types.

Type 1. Beginning with the Duchess de Brabant section, we have a number of excellent sorts, and we would most certainly retain the recognized head of the class, also Mme. Jos. Schwartz, Chas. Rovelli, and Riza du Parc, but Sou. Mme. Pernet, Marie d'Orleans, Sou. Rosieriste, Rambeaux, Mme. F. Brassac, Duchess Magenta, L'Elegant, Marguerite Fenelon or Mme. Remond are almost identical with the type in color, while lacking good qualities found in the three named, and could be dispensed with without loss.

Type 2. Take the type represented by Coquette de Lyon, and followed by Perfection, Monplaisir, Mme. Devacourt, Sulpheureaux, Mlle. Marie Arnaud and Mme. Cecil Berthod; Mr. Craig designated Coquette de Lyon as the yellow Hermosa, and if we retained that we should hardly miss the others; for all the other varieties are defective either in constitution or form.

Type 3. La Pactole, Narcisse, Ex-adolphe, Empress Marie of Russia, Mme. C. Kuster and Canari. Undoubtedly Mme. Kuster leads, producing larger buds, and of stronger constitution.

Type 4. Commences with the old Cels, tea, and is followed by Aurora, Mme. Derroches, Mme. Damazin, La Sylphide, Mme. Angele Jacquier, White Tea, Mme. St. Joseph, Louise de la Rive, Mme. Bravy and others. Louise de la Rive and Mme. Angele Jacquier would be almost unanimously selected to represent

the type, which is characterized by slender growth and quantities of leafage.

Type 5. Abbe Rousseau, Alph. Morteman, La Tulipe, Marie Ducher, Belle Macconnaissance, Countess de Caserta, Eugene Meynadier, Marechal Ingeaud, Mme. Noirey, Pauline La Boute; we would willingly discard all the above if we might retain Mme. Welche and Mme. Watteville, which combine all the best colors represented in the list, without the disagreeable touches of dull violet or purple which mar all the others in greater or less degree.

Type 6. This is notable for it contains Jean Pernet. Perle de Lyon, Perle des Jardins, Edmond Gautier, Sunset, Miss Edith Gifford and last Elizabeth Grammont, but with even so regal a list, it must be admitted that Perle des Jardins and Sunset are the best varieties.

We might set aside further types and select the leader, but suffice it to say C. Barbatannes is better than Duchess. Thuringe, Queen of Bourbons or Mme. Bosanquet; still the last two forcibly remind us of the olden time when we did not possess such gems as we have at the present day. It may be inquired where are Devoniensis, Mme. Margottin, Louis Richard, Mme. Camille, Beauty of Stapleford, Souvenir Elize Vardon, Mme. Chedane Guinoisau and perhaps others; the above are so well known that we might with propriety give reasons for their omission from the list. Devoniensis is too flimsy, and lacks substance; Mme. Margottin has the bad habit of opening imperfectly; often the petals rot at the base, a charming combination of colors, but unsatisfactory from defects mentioned. Mme. Camille, color a dirty, dingy, flesh pink, but admired by a few. Louis Richard, fails almost universally to open its buds. Though one of the finest of roses, when perfect, its bad habit kills its other good qualities of color and constitution. Beauty of Stapleford mildews so badly as to be worthless for open air culture. Souvenir Elize Vardon, known as Laurette Clotilde, Mme. Adelaide Ristori, Southern Belle and perhaps other names, useful in this country only to fill the pages of rose catalogues, but in England said to be one of their finest varieties. Mme. C. Guinoisau is too nearly single for open air culture, and is superseded in color and habit by the new rose Comtesse de Frigneuse.

Your essayist has a special fondness for the hybrid tea class, but they are so subject to black spot and mildew that they cannot (except varieties mentioned) be trusted to open air culture. In this connection might be mentioned the fact that Lady Mary Fitzwilliam, when it does perfect itself, combines as many charms as are to be found in any one rose. It is complete in itself when nicely developed, but it refuses to thrive with the best of culture, in the open air, and soon succumbs to black spot.

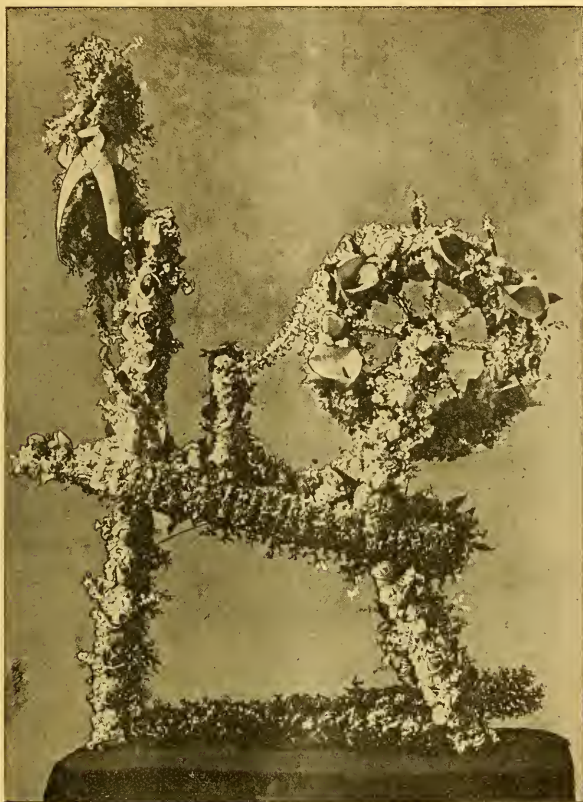
This cursory and necessarily incomplete review of the types and classes of everblooming roses will I hope, be found of use to those who, like the writer, desire the best to be had; for life is too short, and time is too valuable to waste in growing varieties of inferior merit. Let us, as florists, seek the very best, and grow only such varieties as are sure to give satisfaction. The time was, when anything in the shape of a rose would be taken without question, but that day has gone by; if we wish to conserve and build up our trade interests let us disseminate the choicest varieties, remembering that we do not as yet possess the ab-

solutely perfect rose, and that the best are none too good. Intelligent amateurs demand roses of merit, and they don't want any more brambles and thorns with high sounding names attached; they demand the best we have to offer.

It is a notorious fact that the nearer worthless a variety the greater the ease in propagating, and somehow, the poorer the variety the larger the stock on hand, in many cases. Let us have the nerve and courage to increase the dump heap, by emptying our houses of worthless kinds, and as we determine upon the merits of the new varieties from year to year, as they are introduced, let us have the courage to condemn the worthless and commend the good; by so doing we shall keep our lists free from inferior varieties and merit the commendation of intelligent growers everywhere.

It would seem useless to comment upon the Hybrid Perpetual section after the very careful and perfect manner that Mr. John Henderson went through the list last year and we simply offer a short list of the newer sorts which are certainly worthy of trial: Queen of Queens, this is almost as free as our would be American Beauty, alias, Madam Ferdinand Jamain, and it is clean in growth, beautiful in form and of a light silvery rose color. An excellent rose for pot culture, Ulrich Brunner, not a new rose, but one that deserves to be better known. Not unlike Paul Neron in growth but differing from that variety in having beautifully formed shell shaped petals. Mad. Joseph Desbois, said to be a cross between Baroness Rothschild and a tea variety, growth erect and somewhat slim, retaining in a marked degree the leafage of its parent, but withal a most beautifully formed, full rose, almost pure white in color, a promising variety. Ella Gordon, a finely formed scarlet crimson, evidently having a fraction of Bourbon blood in its veins. This can be commended for its adaptability to pot culture. Excellent in color, fine in form and of good habit. Pride of Reigate, is very unique in color to say the least, striped and flaked cream on a crimson ground, in every other essential it is like its progenitor, Victor Verdier. Mrs. John Laing is perhaps the very freest blooming rose in the class. A rose of very great merit, and from indications will do finely in the forcing house, splendid in pots, and valuable in the open ground. Color a silvery rose pink, very sweet. And last but not least is Marshall P. Wilder, one of the very finest roses of its class, and destined to become popular the world over. Color cherry crimson, of good size and free flowering in the autumn.

BEST VARIETIES FOR FORCING OR WINTER FLOWERING. It would seem almost presumptions in me to attempt anything in this line before so many eminent gentlemen, who are thoroughly conversant with this branch; but the writer has a few thoughts; and the first is, that Perle des Jardins has no equal as a yellow rose for in-door culture. Niphetos is the best and most profitable white; La France and Catharine Mermet occupying equal honors among pink varieties. The Bride, a most excellent white and next to Niphetos, should be extensively grown. It would be well to give Pierre Guillot further trial, for with some it shows especial claims for winter work. Papa Gontier is excellent from October until March, but flimsy and open in the intervals between those dates, will supersede Bon Silene in a large measure, as it is larger in size and of deeper color. Sunset is destined to grow in favor.



FLORAL SPINNING WHEEL.

Madam de Watteville and Madam Gabrielle Drevet might be classed as twin roses, differing in color however, both beautiful and charming in their peculiar formed buds, delighting the eye with their unique coloring, but the question is will they furnish buds enough to make them profitable varieties to grow. They are among the strongest growing of the the branching teas, but unfortunately, in winter they incline to produce blind wood if cultural management can overcome this difficulty, then Drevet and Watteville will assert their claims.

Countess de Freigneuse is of good color a little like Niphotos in growth, and as Mr. John Henderson expresses it "I like it and yet I don't like it." It has two notable defects; one is the outer petals, invariably come crimped and defective in color, rendering their removal necessary. Secondly, it has a crook in the stem just below the bud, which in many instances throws the bud downward giving it a drooping appearance, but aside from this it forces well, produces good sized buds, and no one but likes its color. It has strong claims to present as a yellow forcing variety.

W. F. Bennett, with many a most disappointing failure; some of the best growers claim only moderate success in its

culture. If we could all grow these as do Dennison Bros. of Philadelphia and B. P. Critchell of Cincinnati, we would have no cause to complain. Physicians say "keep the feet right and the head will take care of itself." It is quite evident we do not keep the feet of our Bennetts right and herein lies our trouble. When Bennett does well it is a profitable variety to grow.

American Beauty or Madam Jamain; a profitable variety to grow where the price does not run below 16 cts. wholesale, but where perfect blooms have to be sold for less than that in the forcing season it will not pay to grow. Plantsmen in our smaller cities, where they grow their own supplies, had better occupy their space with some more prolific variety. This variety is all that could be desired for market purposes in pots in the spring season. When good prices can be had grow American Beauty.

Puritan.—The same remarks apply to Puritan in measure that we have cited against American Beauty. Unless a good figure can be gotten for the flowers, rose growers in the smaller towns and cities have no special business to occupy much space with it but we most emphatically recommend the rose to growers in or near the large trade centers, for it is a rose of

unquestioned merit and destined to make a mark for itself where hybrid roses are wont to be used. It is subject to black spot, but this perhaps will be overcome by good cultivation and growing it either on its own roots or some more suitable stock than the Manetta.

Luciole.—This is a seedling from Red Safrano, of splendid color, strongly scented, free in bloom, forces freely and a most promising variety. Predominating color a soft crimson shaded with golden yellow. Forces well.

#### Worked Roses vs. Those on their Own Roots.

BY H. A. SIEBRECHT.

This subject was well ventilated at the late convention in Chicago by able and experienced growers, and the tide certainly set strongly in favor of roses on their own bottoms. In the case of roses under glass there may be an excuse to occasionally work varieties which are weak, but with hybrid perpetuals for out-of-door culture a great deal of harm has been done and but little good accomplished by planting false bottom roses. Indeed so much disappointment has been experienced by amateurs from planting worked roses, that to my own knowledge some who used to be anxious to secure all the new sorts have well nigh given up the idea of ever having a rose garden, and I consider the use of worked roses to be one cause of the scarcity of rose beds in this country; I for one have sworn against them. We have such a large number of good sorts that do well on their own roots, and which we can grow as cheaply in this country as we can import the long worked Shanghais from the other side of the water, that there is no earthly necessity for using the last named.

If we grow and sell roses on their own roots we need not fear that after the first bloom, or after the first season, they will throw their whole strength into suckers. I remember a case where the strong briars were carefully pruned and tied up, and what little wood of the worked rose that was left was pruned away by the not too well posted cultivator. Result, condemnation of the florist as a fraud, and discontinuance of the cultivation of roses. Sell roses on their own roots if you want them to give satisfaction and your trade to increase. However valuable they may be in other countries, they are valueless here, and the sooner we drop them, at least for out-door culture, the better it will be for us.

#### Floral Spinning Wheel.

The novel funeral design illustrated was arranged by Mr. Frank Bentley, of Hovey & Co., Chicago. The design was four feet in height to the tip of the distaff, the latter being supplied with "flax" composed of natural colored sea moss. The "thread" over the wheel was of lavender colored hyacinth florets strung together, and the spokes of the wheel of white Roman hyacinths treated the same way; the treadle was of violets. Across the central bar were traced the words, "Her work is done," the design being used at the funeral of an aged lady who had lived an exceptionally busy life.

SPRINGFIELD, MO.—C. L. King & Co. have sold out to S. H. Harine who has built two new greenhouses 250x20 and 300x20 for vegetable forcing. He will build another 150x20 this fall, the whole to be heated with steam.





Early Crops.

Chicago growers are housing their carnations, and a large proportion will be under cover before our issue of Oct. 1. To secure an early crop of flowers the plants must be housed before that date in this latitude, and must not be pinched back later than Aug. 10 to 15. Those which are intended for later blooming may be pinched back later, but if done as late as the present time flowers may not be expected inside of ten weeks.

**CARNATIONS.**—In regard to indoor culture of plants during summer I think there are some varieties of good habit like the one mentioned by B. (Hilze's White) that will do well under glass in summer where plenty of air is given during the entire twenty-four hours. And allow me to say here that I feel assured that Hilze's White is destined to become one of the leading white carnations on account of its vigorous habit if for no other reason. It has been discarded by some on account of its not coming pure white during some of the winter months, but with me it produces some of the finest blooms, both for size and color, that it has ever been my fortune to see. At the present time I have a bed of this variety which has been in bloom most of the time since last September and it is now producing some very good flowers.

Stoughton, Mass. J. H. FRENCH.

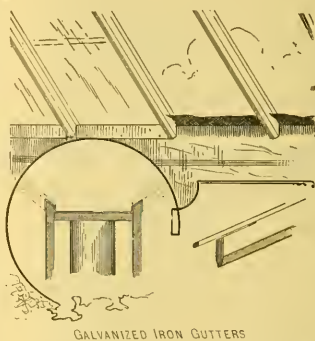
**CARNATIONS.**—If manure is used in the soil for carnations, see that it is well rotted, for fresh manure of any kind is a positive injury to these plants. Though carnations are half-hardy in their nature, it is undesirable to allow any frost to touch those we intend for winter forcing. The flowers will suffer if we do; therefore, it is poor policy to leave carnations out too late. Some years back, nearly all the growers around New York suffered more or less from this cause, owing to the fact that when September was about two-thirds gone, there came two nights of sharp frost, the temperature falling in some instances to 28°. The plants were not killed, but buds were. Of course such an early frost is unusual, but the fact that we are liable to one at any time after the middle of September, should make every florist cautious about delaying the lifting of his carnations until late in the season. Better be a few days too early, than a few days too late. Directly after planting, commence smoking lightly, continue it frequently, and no green fly will make its appearance. No insecticide can equal this remedy for economy and efficiency.

#### Galvanized Iron Gutters.

Leaky wooden gutters between houses built on the ridge and furrow plan cause much annoyance, and by rotting out in a very few years make a heavy drain on the profits for rebuilding. Galvanized iron gutters cost a little more in the first place but they are beyond question the cheapest in the long run.

We give a sketch herewith showing the method of placing a galvanized iron gutter, in use at Lincoln Park, Chicago.

The sections of iron are partially shaped on a plank in the work shop and after being soldered are bent over and the edges nailed down inside. Thus the lower light of glass laps on to the iron and as water generally collects under this lap, the wood is protected and will not rot as is the case where the glass laps directly on the wood. As shown in the sketch a slit is sawn in the bar at the rabbit and the iron thus extends up about two inches under the glass on the bar. The gutter is set with the edges bent to the same angle the roof is to be, the bars set in position, the iron running into the slit, and the bar secured. Then one man holds a sledge below the bar, while another with cold chisel and hammer cuts the iron on each side, the iron is then bent down to the plate and nailed. The gutters on two houses built in this way two years ago, show no sign whatever of rust or rot.



GALVANIZED IRON GUTTERS

#### Plant Notes by Wm. Falconer, Long Island.

**CENTAUREA RAGUSINA**, as usual, behaved rather badly this summer.

**SWAMP ROSE MALLOWS** the second season from seed are blooming freely.

**LEMON-SCENTED VERBENA**.—Of these we cannot get too much. It is a great favorite.

**SEDUM SPECTABILE** is now at its best. S. Sieboldii and S. Eversii are not in bloom yet.

**PHYSTOSTEGIA VIRGINICA**, a purple-flowered perennial, is now in full bloom, but too coarse.

**ALTERNANTHERAS** have grown immensely, but it was late into summer before their color was perfect.

**SINGLE PETUNIAS** are capital in open sunny places; in shady places, straggling and poor. Double petunias set out last May are now in use now.

**OUR BEST** clumps of *Lilium speciosum purpureum* show nineteen flowers to a stem. It is the best of the group, but *Album precox* is regarded as the best white.

**HELIOPSIS LAEVIS** is a bright and pretty sunflower-like perennial that blooms all summer long, but once it gets a footing in the garden it becomes an inveterate weed.

**RUBRICKIA SPECIOSA** is one of the prettiest of cone flowers. Our plants, some eighteen inches high, are now and have been in good bloom since midsummer.

**BLUE AND YELLOW VIOLAS**.—Blue Belle, violet blue; and Golden Gem, yellow, are the only bedding violas now in full bloom at Woolson's. Both are pretty.

**TORENIA FOURNIERI** never behaved better than it has this summer; it keeps thrifty and in bloom all the time. I know of no other flower whose colors are better matched.

**DELPHINIUM GRANDIFLORUM** (Sineuse) gives me the best deep blue I now have among flowers. This is the second crop. As a beautiful pale blue, *D. belladonna* is unsurpassed.

**CLEMATIS PANICULATA** from Japan is now in full bloom at Woolson's, Passaic. It is a white-blooming vine in the way of *C. flammula*, and being very copious and pretty and blooming so late as September, it is a desirable plant.

**THE MIST-FLOWER** (*Conoclinium teelestinum*) is now in bloom. Its violet-purple flowers much resemble those of blue ageratum. But the plant is a hardy perennial. The ageratum is perpetual blooming; the mist-flower only fall blooming.

**CLEMATIS TURBULOSA** is another species in the way of and blooming at the same time as *C. Davidiana*, but it is not so copious, showy or fragrant. When Mr. Parsons, superintendent of Central park, saw it here last summer he admired it as an appropriate plant to use as a margin to shrubberies.

**AUTUMN PHLOXES**.—In August and September, how magnificent! We have masses of white five feet across. The colored varieties are less useful for "cut" work, but perhaps more showy in the garden. The following, new to me, are lovely: Liervallii, pink and white, striped, capital; Coccinea, deep red; Ball of Fire, brilliant red.

**VERONICA LONGIFOLIA**, var. sub-sessilis. This is the finest blue and best of all the upright veronicas, and the fact that it keeps in bloom till September much enhances its value. I had it from Ware of England in 1881, and have found it to be hardy, vigorous and copious, and one of the most desirable of all hardy herbaceous perennials.

**CASSIA CORYMBOSA** is a yellow-flowered shrubby plant from South America. It comes into bloom in August and lasts through September. It is a capital thing for masses in parks and gardens, but of no use to the "cut-flower" florist. I raise it from seed. Cuttings root all right, only they are tedious sometimes. Plants over one year old are the best bloomers. It is tender and must be wintered in the greenhouse.

**BLUE PLANTAIN LILY** (*Fimbrilia lanceifolia*).—August-September is the heyday of this species. Although not very showy, as it blooms so late, it is a capital thing among hardy plants. Woolson has a form of it called "spatulata," which has larger and better flowers. Another improved form from Japan was recently given him by Mr. Hogg. In the open nursery rows I find Mr. Woolson's alio-marginata varieties lose their variegation a good deal at time of year. Now with me, and grown in half-shady places, they still retain their white edgings.

**CLEMATIS DAVIDIANA**.—A non-climbing herbaceous species from N. China; violet-blue, fragrant, and at best in August, but lasting into September. The flowers are like the single bells of hya-



BEGONIA GLOIRE D'SCEAUX

cinths and crowded in dense axillary and terminal heads. The plant grows two feet to three and a half feet in height, in large clumps, and is extremely floriferous. It is one of the finest hardy plants we have of any season. But the bumble and honey bees infest it so much that with their fussing and stamping about on the blossoms they mar them very much.

**MONTRETIA CROCOSMEFLORA.**—I keep the bulbs over winter in moderately dry earth or sand. In May I plant them out thickly in rows in beds. From July till October they bloom in great profusion, and the flowers, which are orange, are well fitted for cut purposes. *M. Pottii* has darker, even prettier flowers, but it is so shy about blooming with most folks that it is hardly worth bothering with. And for florists' use especially such things as *M. Pottii*, *Schizostylis coccinea*, and some others that yield but few flowers, do not pay for their room and the trouble bestowed on them.

"THOSE ROSE-COLORED CANTERBURY BELLS you exhibited at Mineola were the prettiest flowers in the exhibition," is what Mr. N. Hallock wrote me. This was *Campanula medium calycanthema*

*rosea* of Veitch. Yes; I like Canterbury Bells, and raise lots of them. I sow in June, prick off into boxes in July, and thence into cold frames in August. They grow fast, and if too thick will rot each other in the frames. With this in view, I already have shortened in their leaves, and will repeat this once or twice before winter. In this way I get stocky plants. They all will bloom next June. I never save over old plants.

**PYRETHRUM ULIGINOSUM.**—Mr. Rohinson, the editor of the *London Garden*, says of it: "Is one of the noblest of all tall-growing herbaceous plants, forming dense tufts five feet to seven feet in height, terminated by lax clusters of pure white flowers, each about twice the size of those of the Ox-eye daisy." \*

"It is excellent for cutting purposes." All true enough. And still John Saul told me some years ago that he has had more abuse from his customers about this plant than any other he ever sold; they would insist it was only a white weed. But it isn't. I have it now four feet high and as much as that across, and one mass of flower buds that are now beginning to open. It is a hardy perennial.

**HELIANTHUS MULTIFLORUS** is a capital perennial (barely hardy though, but all right in a cold frame over winter) that blooms from midsummer till fall. It is neat, showy, free-flowering and capital as cut flowers for large masses. The variety *H. m. majus* is an improvement on the tropical form, but that known as *H. m. maximus* is by far the finest of the single-flowered ones. The double-flowering one, *H. m. fl. pl.*, is the one most grown, and, too, the showiest. Louis Siebrecht tells me that some years ago it was in great demand in New York, but now it has become common and the people don't want it. The influence of rich soil on this sunflower is very apparent; in ordinary land its average size is five feet high, but in extra land I now have it seven feet high, and the flowers are splendid.

**TRITOMAS.**—Among many species of these now in bloom at Woolson's, *T. corallina* is the prettiest. Thorburn sent it out as a novelty among his flower seeds this year. I got a packet of seeds of it from him, and from it now have a box full of thrifty little plants. *Tritoma Uvaria* is grown in large quantity by some of the large florists of Long Island. If one can get the true *T. Uvaria grandiflora* he will have a very superior form. Woolson in his catalogue speaks of *Tritonia caulescens*: "Flowers in great profusion." Well, that is contrary to my experience, and I find that it has an ugly habit of damping off in summer. I see some of Mr. Woolson's have gone in the same way. *Tritomas* are easily raised from seed, and if well cared for we get blooming plants in two to three years.

#### Begonia Gloire d'Sceaux.

Begonias are an interesting and valuable class of plants, and destined to grow in favor with the general public; the ease with which they are managed, the beauty of leafage that characterizes both the flowering and the Rex section, recommend them to all plant lovers. The many additions being made annually by discovery and by cross fertilization to an already numerous species lends an additional charm to their study. Notable among recent introductions is the variety which is placed before the readers of the *FLORIST* in the accompanying wood-cut.

It was raised by Thibaut & Ketteleer, and is perhaps the most valuable addition of later years; it certainly is totally distinct from any other known variety, and is a wonderful flower producer in the winter months. The bloom is borne in large compact trusses, and the florets are perfect in outline, of uniform size, and of a most delightful shade of pink. The leaves are ovate and slightly pointed, of dark bronzy plum color, with high metallic luster. It is the result of a cross between *Begonia socotrana* and *B. subpeltata nigricans*. The very perfection of a beautiful pot plant; habit and foliage all that could be desired; it will flourish in almost any soil.

Van Geert of Ghent is unqualified in his praise of this begonia, and no wonder, when we consider the height of the plant, which will average sixteen to eighteen inches, the size of the leaf, which nearly equals that of the Rex section, and the size and continuity of its bloom, which gives it the appearance of a bouquet for several months.

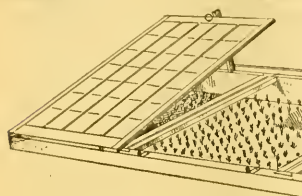
E. G. H.

BATAVIA, N. Y.—The Genesee County Fair will be held here Sept. 20-22.



## Growing Bedding Plants.

"Necessity is the mother of invention," and sharp competition gives birth to reduced cost of production. In the production of bedding plants no such advance in methods has been made as in the production of most other things necessary to the comfort of humanity. A very considerable advance has



PROPAGATING FRAMES.

been made; still the prices of those bedding plants of which the largest quantities are used have dropped very close to the cost of production with the methods employed in many places. The only way to meet such a state of affairs is to reduce the cost of production. If you find you cannot do this, waste no time in seeking other business, for you will wait in vain for an advance in prices. If you can discover means by which you may reduce cost of production, you will be one of the survivors of the crucial period through which the trade will pass, as all trades have heretofore done.

To those who doubt that the cost of producing large quantities of bedding plants can be materially reduced, we will give some figures. At the greenhouses of South Park, Chicago, are produced annually fully 200,000 bedding plants, all of good size and first quality. These are grown in nine houses, 100 x 12 feet each, and hotbeds which are covered by 200 sash, 6 x 3½ feet each. At the Lincoln Park greenhouses, in the same city, 175,000 plants are grown in six houses, 100 x 12 feet each, and hotbeds which are covered by 260 sash, 6 x 3½. At the last-named place four men and one boy are constantly employed both winter and summer.

It will be noted that the hotbed sash constitute a very large share of the total amount of glass used, and these hotbeds and cold frames play an important part, at slight expense, in the production of the bedding plants grown. At this time, in a frame in which is placed two inches of sand, propagating is being carried rapidly forward. We give an illustration of a part of the frame filled with cuttings of *alternantheras*. Another frame is filled with cuttings of *coleus* made from the trimmings of the fancy beds. These cuttings when rooted will be potted into 2½ inch pots, and will be placed in another frame to remain until October, when they will be removed to the greenhouse; about the holidays they will be repotted into 3s, and during the latter part of March cuttings will be taken from them for the main crop and the old plants thrown away.

A diagram of the frame yard at Lincoln Park will be found on this page; the yard is protected by a 6-foot tight board fence on all sides except toward the south, where a picket fence does duty. The arrangement of the frames, tool and storage sheds, etc., can be seen by consulting the diagram. The walks

between the frames are all sufficiently wide to admit a wheelbarrow, and all devices which can be made to save labor are utilized.

Stored at one side may be seen a large quantity of board shutters—of which we give a sketch—which are used to cover the frames at night during very cold weather. They are made of matched stuff, and are found to be much more desirable than straw mats, in addition to lasting much longer. They are painted and protected from the weather when not in use.

In the spring these frames are made into hotbeds, and as early as the middle of March many plants are moved into them from the greenhouses, making room there when it is very valuable. At this early date geraniums, *echeverias*, *alyssums*, *alternantheras*, *othonnos*, *pileas*, *heliotropes*, *oxalis*, *feverfews*, *Cineraria maritima*, *cupheas*, *thymus*, etc., can be placed in the hotbeds with safety in this latitude, if proper attention is given (one man has charge of the frame yard and is looked to for proper care of the same). About the middle of April such plants as *cannas*, *caladiums* and *annuals* are placed out in the beds. *Coleus*

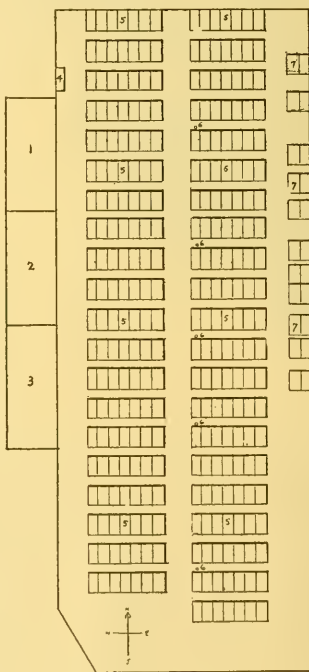


DIAGRAM OF FRAME YARD.

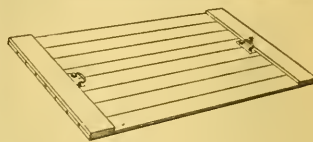
1. Tool house. 2. Storage house for pots. 3. Store house. 4. Potting bench. 5. Frames. 6. Hydrants. 7. Stored sash and board shutters.

and *achyrantes* are retained in the greenhouse and make their growth there.

The beds of geraniums must of course be made a little deeper than those for lower growing stuff, and the plants do not require so much heating material under them. At the Lincoln Park frame yard 160 sash are devoted to them, very few of these plants, if any, being kept in

the greenhouses after April 1, it being found that the plants make a better growth in the frame in addition to saving room.

The great value of these hotbeds and frames as auxiliaries to greenhouses is not thoroughly appreciated by many smaller commercial growers—many making use of them for only such plants as pansies and verbenas—which is the excuse for this description which may appear superfluous to some in the trade. If



BOARD SHUTTER.

you grow bedding plants and need to increase your supply, add more hotbed sash and frame room rather than build new houses, unless you already have as much glass on frames as on houses.

A very important matter in connection with a frame yard is to have an adequate supply of water. It will be noted that service cocks are liberally distributed through the diagram shown. G.

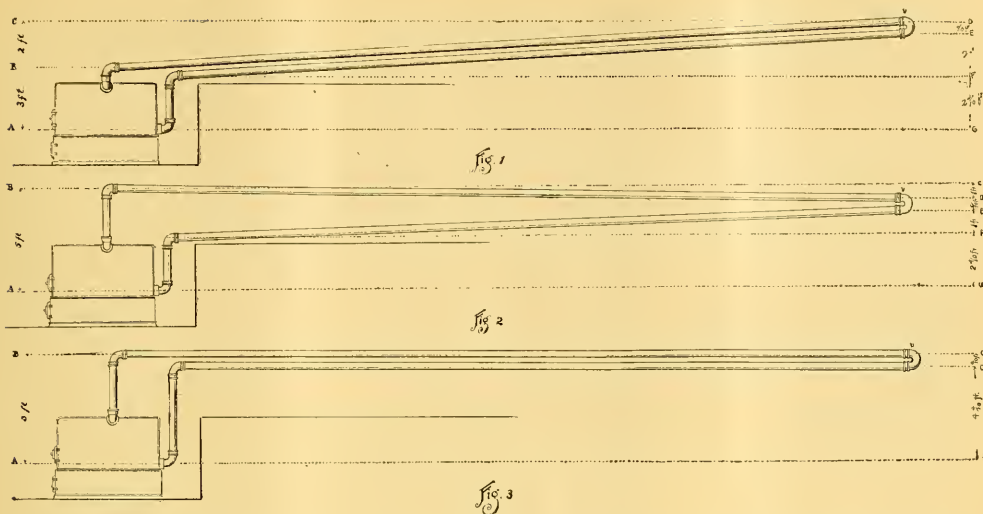
MARIGOLD, "EL DORADO."—I have given this marigold a fair trial this season. As a bedding plant it is pretty much a failure, but as a foreground for shrubbery, or in any similar position, I consider it a gem. It has bloomed freely with me from beginning of June, and very few single flowers. A. W. M.

## Hot Water Circulation.

Although considerable space has been given in the columns of the *FLORIST* to controversy as to the best way to lay greenhouse pipe, the question seems to have been left still unsettled, with each writer only the more convinced that his view was the correct one, and the beginner, trying to decide how to pipe his new greenhouse, only the more bewildered after reading the conflicting testimony of "Heat," "Retsbew" and others. The question is one admitting of easy and reasonably accurate mathematical solution, and as "figures cannot lie" (if we can only get the right figures), that would seem to be the proper way to approach the subject.

Circulation is not caused, as sometimes stated, by the tendency of hot water to rise; it has no such tendency. Its pressure is exerted downward, but is more than counterbalanced by the greater downward pressure of colder water, which forces the warmer to the top. Circulation depends, then, on the varying pressures excited by the weight of water of varying temperatures in different parts of the pipe. Of course, the longer the pipe the greater will be the retarding power of friction, but greater also will be the difference of temperature between flow and return, and hence greater the excess of pressure in one direction. We may therefore, without sensible error, regard these augmentations as balancing each other, and proceed on the assumption that the pressure is a function only of the vertical distance between opposite ends of each section of pipe under consideration.

In the figures 1, 2 and 3, which are intended to represent the "Up Hill,"



"Down Hill" and "Level" systems, the pipe is for convenience divided into sections A-B, B-C, etc, in each of which a pressure is exerted in the direction from its higher towards its lower end equal to the weight of a cylindrical column of water with diameter equal to that of pipe, and height equal to difference of elevation between highest and lowest points, and temperature a mean between that of its extremes. (This last assumption is not rigidly exact, but the error is too small to be of consequence.) Using the formula given in Prof. Rankine's "Steam Engine," the following values were obtained for the weight of a cylinder of water four inches in diameter and one foot high:

Temperature, Fahr.	Weight, lbs.
100	5.4087
120	5.3812
140	5.3486
170	5.2931
200	5.2282

Let it be assumed that the mean temperature of the column of water A-B, extending from the bottom of heater inside to center of first elbow, is 200° Fahr.; that the temperature of the corresponding column outside, from center of last elbow to bottom of heater, is 100°; and that the temperature at the bend farthest away from heater is 140°; then the average temperature of the top pipe will be, approximately, 170°, and of the bottom pipe 120°. Assume the vertical distance from bottom of heater to center line of highest point in pipe to be in each case 5 feet. Let the other vertical measurements be as figured in the diagrams. Let pressures operating in the direction of flow be designated as *plus*, and those in the opposite direction as *minus*. Then in Fig. 1 we have:

	Height.	Tempe- rature.	Weight per foot.	W'ght of Column.
Column A B	3 feet	200	5.2282	15.6846
" B C	2 feet	170	5.2931	10.5862
(1) Total minus pressures = 26.2708				
Column D E	0.6 ft.	140	5.3486	3.2092
" E F	2 ft.	120	5.3812	10.7634
" F G	2 ft.	100	5.4087	12.9809
(2) Total plus pressures = 26.9535				

Deducting (1) from (2) we have for resultant pressure in direction of flow .6817 pounds. Under this unbalanced pressure of 68-100 of a pound the water moves with an accelerated velocity till the resistance of friction just equals the moving force, when the velocity becomes constant.

Applying the same method of analysis in Fig. 2, we have:

Minus pressure column A B=5 x 5.2282=26.1410

Plus " " " C D=1 x 5.2931= 5.2931  
 " " " D E=0.6 x 5.3486= 3.2092  
 " " " E F=1 x 5.3812= 5.3812  
 " " " F G=2.4 x 5.4087=12.9809

Total plus pressure 36.5644

Deducting from this the total minus pressure, 26.1410, gives for resultant in direction of flow .7234 pounds.

In Fig. 3 we have:

Minus pressure column A B=5 x 5.2282=26.1410

Plus " " " C D=0.6 x 5.3486= 3.2092  
 " " " D E=4.4 x 5.4087=23.7983

Total plus pressure 27.0075

Deducting 26.1410 from this gives for resultant in direction of flow .8665 pounds.

It thus appears that the relative merits of the "Up Hill," the "Down Hill" and the "Level" systems are as the figures .6817, .7234 and .8665. If in Fig. 1 we should make A B=4 feet, and F G=3.4 feet, we should find by the above method the resultant plus pressure=.8622, or almost exactly the same as found for Fig. 3 with the previous measurements. That is, in the case assumed, other things remaining the same, we could by increasing the depth of the furnace pit one foot improve the circulation in an up-bill system of pipes as much as we could by changing it to a level system.

It was perhaps almost unnecessary to go into figures to prove plan 3 the best, since mere inspection shows that here the water is raised at once to the highest point while it is hottest, and therefore lightest, and being kept at that elevation till it has cooled all it is going to, does all its falling when it is at its heaviest. This is about the only advantage one system has over another—viz., raising the water when it is lightest and dropping it when it is heaviest. There is nothing in

the talk we sometimes hear of its being "contrary to nature to try to make water run up hill," etc. In a pipe making a complete circuit, the weight of the water remaining the same, it would be just as easy to force it all the way up hill to a given point as to raise it first vertically to the required height and then along a level to the same point. Up hill or down hill makes no difference except as above stated, since for every up hill there must be a down hill to balance it, and in fact, if the water is required to do most of its rising while it is hottest, the pipe might be tied in a double bow knot before returning it to the heater, and the circulation would still be good, *provided* (and this is assumed as a matter of course in all the previous discussion) that air vents were furnished at every point where a downward turn is made; such points are designated by V V on the diagrams. This being done, the position of the expansion tank may be dictated solely by convenience. These vents may be 1/4-inch pipe tapped into the bends just back of shoulder, and rising to the same height as expansion tank; or if this be inconvenient, small air cocks may be substituted, to be opened for a moment as often as experience shows to be necessary.

Ells and return bends should be cast with a square lug just back of shoulder, for the double purpose of giving thickness of metal sufficient for boring and tapping, and to furnish a convenient point to block against while packing the joints. Probably any maker of greenhouse fittings would be glad to add these lugs to his ell and return bends if asked to do so. Every one who has ever packed pipe knows how difficult it is to hold an elbow with its curved surfaces so that it shall not be "wobbly" while the joint is being tamped.

While speaking of vents it may be well to allude to the special point that one writer made of the necessity of providing ready and immediate escape for *steam*, which might find its way into the pipes in case the water in heater were raised above boiling point. It seems to the present writer that to allow this steam to escape would be a



useless waste of heat, since the water in the pipe is certain to be reduced to a temperature below 212° very soon after leaving heater, and as soon as this occurs the steam will be condensed and offer no impediment to free circulation; but for *air*, which is always present in water and always liable to rise to the top of the pipe in bubbles, it is imperatively necessary that proper outlet should be furnished, and from the writer's experience he is led to believe that neglect of this precaution is the only cause of nine cases out of ten of imperfect circulation, since with due attention to this point he has seen some shockingly up-hill and down-hill lines of pipe that yet gave an entirely satisfactory circulation.

To recapitulate, it seems that to secure the best circulation the following are the proper conditions: (1) Set the heater as far below level of greenhouse flow as possible. (2) Carry the pipes at once to the highest level intended and keep them high, letting all the fall be a vertical one on returning to the heater. (3) See that air vents are provided wherever a downward turn is made.

JAMES DUNCAN RAYNOLDS.  
Riverside, Ill., Sept., 1887.



Cultural Notes.

I am almost daily receiving inquiries relating to the loss of the points of the shoots of chrysanthemums, and I believe that all cultivators have been much troubled in this respect this season. If the points of the shoots were examined closely both night and morning, it would be found that those shoots affected are infested by three kinds of insects, perhaps not all upon one plant. Earwigs are very plentiful this season, and are the chief cause of the mischief. These pests hide themselves among the young leaves, burrow down the side of the leading stems, thus crippling the shoot, and causing it to slightly curl on one side, and in many cases rendering it entirely blind. In some instances, partial damage only, out of which the plant grows in time, is done. Nothing but hand-picking will clear these depredators, and trapping them with inverted pots placed here and there on the tops of stakes among the plants. Inside the pot place a small quantity of moss, which should be examined every morning, and any earwigs found immediately destroyed. Another species of insect that is troublesome is a small brown one, almost round in shape, commonly known as the jumper. A large green fly, about as large as a common black fly, is also very destructive to the points of the shoots.

By examining the plants carefully from time to time, and destroying all the pests that can be seen, the latter may easily be got rid of. Princess Teck and Hero of Stoke Newington are two sorts especially subject to these ravages. Another drawback to some growers of the chrysanthemum is a disease appearing amongst the plants during the months of August and September, generally after three or four successive rainy days. On the first appearance of the disease a small black speck

appears upon the leaves, and gradually spreads to about three parts of the length of the stem and entirely spoils the foliage. I do not know what the disease is, but I have noted that it is most prevalent where soil of a retentive character is used, thus suggesting that sluggish or defective root action may be the cause of the evil. The only preventive I can suggest is to prepare the soil for the final potting very carefully in the manner previously described, and thus reduce to a minimum the chances of the disease appearing. On the first appearance of the disease keep the soil in the pots rather drier than otherwise for a time, and the foliage should not be wetted except by dews or rains. If the grower is obliged to use a retentive soil, it should not be rammed very firmly in potting, thus allowing the water to pass away more quickly. I have seen plants denuded of three parts of their foliage in a few days by this disease, in consequence of which such plants must receive a serious check by such an early loss of the leaves before they have performed their natural functions. Fortunately for cultivators of the chrysanthemum, there are few diseases which affect the plants in any way, and these, if taken in time, are amenable to treatment.

Cultivators of chrysanthemums for the production of the finest blooms, either for show purposes or home decoration, will soon be on the look-out for the appearance of the flower buds. In some instances varieties are now showing buds. This is a little earlier than usual, owing, no doubt, to the very hot weather lately experienced, in consequence of which the plants have made rapid progress. If there is one detail in the cultivation of chrysanthemums for large blooms that is of more importance than any other, it is the selecting and retaining the proper kind of flower bud for each variety. That there are certain buds which do produce finer flowers than others is now beyond a doubt; therefore it is necessary to study the various details so that the best blooms will be forthcoming. Amongst growers the common term used is "taking the buds," and some persons may think this means pinching off the flower buds, but that is not so; it means the removing of the growth shoots which form around the flower bud. The formation of the flower bud in the point of the shoot causes other growths to spring from below where the bud is formed, and when these growths are taken off the whole strength of the plant is thrown into the development of the bud retained. Only experience with the different varieties will thoroughly teach beginners the proper time to "take" the buds. If the buds are not retained at the proper time for each variety, it is useless to expect flowers of first-class quality. It is not on a particular day of the month that all buds must be "taken," but the state of each individual plant must be taken into consideration when the wished-for bud appears. No hard-and-fast line, therefore, can be laid down as to the time when every plant should set its proper bud. Generally, what is known as the crown bud produces the best blooms, but in some instances this particular form of bud will not produce the best results. As a general rule, plants which are grown in what is termed the "big bloom" method show three buds during the season of growth. If the plants were propagated at the proper time and grown on in the manner indicated, the first break is made from the middle of May to the middle of June. Sometimes buds will form in July, and these must in every case be considered useless,

and should, of course, be removed. The bud, which I will term the "crown" is formed in exactly the same way as the one formed in May. When this bud shows at the correct time for each variety, and is "taken" then, all other things considered, it will develop into a perfect flower. When this bud is removed other growths start, and in time form buds which are known by the name of terminal buds. These are the best buds to select for some kinds, particularly in the south of England. The all-important point then to study is the time at which the crown bud forms. If it forms too soon the flowers are coarse in the petals, which very often in the case of incurved kinds become reflexed. Such flowers as these are loose and flabby, and more like inverted saucers than globe-shaped, which many incurved varieties ought to be. Such flowers cover space enough, but are devoid of depth and solidity, the two most essential points in a good flower. The dark varieties also in the case of the crown bud forming too early are not nearly so highly colored as they ought to be. Many beginners make a great mistake then in "taking" the buds too early, and disappointment is sure to follow where quality is considered of the first importance. Then, again, if the buds are selected at too late a period, the flowers produced are neat in appearance, but much too small. Some kinds do not, under this treatment, exhibit their true character when in a small state. The locality in which the plants are being grown has also to be considered, as there is a difference of quite a fortnight, and in some cases a month, between the seasons of the buds showing in the south and north of England. Crown buds ought to be taken earlier in the northern counties than they can with safety in the south.—E. M., in London Garden.

#### Eucharis Amazonica.

I am often surprised that this lovely plant is not more generally cultivated by commercial growers. It is about as easy to grow as a geranium, and although the cut blooms are valuable in themselves, they possess such lasting qualities when allowed to remain on the plant as to render it most valuable and attractive for decorative purposes. One of the prettiest center pieces I have ever seen consisted of a shallow dish compactly filled with flowering bulbs of *E. amazonica* and *E. candida*. They had been shaken out of their pots and packed in the dish with damp moss. They stood this treatment with as much grace as a hyacinth or tulip.

The soil I find best adapted for growing eucharis consists of two parts good loam, one part leaf mold or peat, a little sand and a generous addition of bone dust.

If a sufficient stock of plants are kept on hand for succession, eucharis may be had in bloom the whole year round. They are most desirable, however, in winter, and if a batch of plants are potted off now and properly attended to they will abundantly repay the grower. They should be kept close and well syringed for a few days after potting; afterwards reduce the temperature, increasing slightly when flowers are wanted. I flower mine nicely in a temperature of 70° Fahr. Eucharis require free syringing to keep down red spider. They need plenty of water at the roots, and in order to obtain the best results the bulbs should never be entirely dried off.

Baltimore.

A. W. M.

### Alternantheras and Geraniums.

For those who have not already rooted cuttings of alternanthera, the following, I think may be of service. Take up your plants before frost, cut back the tops and roots, and pot in 3 or 4-inch pots. Make the soil sandy and set the plants in deep; by February nearly all the stems will have taken root and the plants can then be divided, making from ten to twenty-five good plants from each. This method takes less space during winter and less attention, than the common one.

I prefer potting geranium cuttings before they root, rather than after. The young roots of the geranium are very easily broken off, and they root very readily and all the roots are saved if they are potted as soon as they are calloused. This is especially advisable if the cuttings are damping off. G. W. McCLURE, Champaign, Ill.

### SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order.

**SITUATION WANTED**—Gardener, single, first-class greenhouse man; good propagator and plant grower. Address, GARDNER, Shoemakerstown, Montgomery Co., Pa.

**SITUATION WANTED**—By a boy of 18 to learn the florist business, near Chicago; vicinity of Philadelphia preferred. Address U. M., 421 Walnut St., Philadelphia, Room 15.

**SITUATION WANTED**—As head gardener, either private or commercial. Have had long experience, and can furnish satisfactory references. Address C. D., care W. J. Stewart, 67 Bromfield St., Boston, Mass.

**SITUATION WANTED**—By a competent and experienced gardener, on a private place. Salary expected \$25 a month with board and lodging, or \$15 a month if boarded myself. Address, R. care American Florist, Chicago.

**SITUATION WANTED**—By a married man, as foreman in a commercial or private place. Understands the business in all branches. Unquestionable references as to experience, etc. Address P. O., care Begorow & Gerlach, Newark, N. J.

**SITUATION WANTED**—By a first-class florist, S. had large experience in the commercial business; is a thorough rose grower, plantman and propagator. Formerly from the east; married. Only those requiring such a man for commercial trade, need apply. Address W. 530 51st St., Chicago.

**SITUATION WANTED**—By a German gardener S. and florist; 10 years' experience; understands the cut flower trade in all its branches. Good flower worker and fancy breeder. Capable of taking charge of commercial business or private place. Address Florist, Postoffice box 34, White Plains, N. Y.

**SITUATION WANTED**—By a competent gardener S. of 40 years' experience; No. 1 at rose growing and propagating all kinds of greenhouse plants, hardy shrubs; also landscape gardener and designer in all its branches. Address CHAS. LONG, gardener to Mrs. Gibbs, Nunda, N. Y.

**SITUATION WANTED**—In office of a growing concern where there is sufficient capital to properly extend the business. Have had the management of catalogue and the growing of small fruit and greenhouse plants for eleven years. Can bring some trade with me. S. S. W. 225 W. Genesee Street, Syracuse, N. Y.

**WANTED**—600 feet 2-in. or 1½-in. wrought iron pipe—second-hand—in good order. Lowest price on board cars. Address GEO. F. CUTLER, Taunton, Mass.

**WANTED**—If E. Faust, formerly a florist and gardener for Leroy Payne at his Horses Home, will call at the Palmer House La Verdy Stable, Chicago, he can learn something to his advantage.

**WANTED**—Every florist to order ready packed crates of pots—see our "ad," ask prices and frt. Orders filled instantly. Cheap frt. to all Western towns. SYRACUSE POTTERY, Syracuse, N. Y.

**WANTED**—To rent or buy, a small florist place in good order; one within 100 miles of Philadelphia preferred. Address A. G. S. care American Florist, Chicago.

**WANTED**—A competent, energetic man (florist), single preferred, who is willing to attend to and out-door work. An industrious man will find steady employment. Address R. MAYNIE, 7 Camp St., New Orleans, La.

**WANTED**—FOREMAN—One who understands growing roses, and general stock of flowers and plants for retail trade; must be temperate and energetic; no other need apply. HARRY CHAPEL, Williamsport, Pa.

**WANTED**—A practical florist to take charge of greenhouse, one who thoroughly understands the business. State salary; must have references. Married man preferred. Address, GARDNER, Bros., Seedsmen and Florists, Freeport, Ill.

**FOR SALE**—Several thousand Hydrangea P. G. in 2½-inch pots, nice plants, 4 to 6 inches high, \$3.50 per 100. D. LEE & SON, Madison, Ohio.

**FOR SALE**—Greenhouse and stock, lot 105 x 140 ft. in town of 25,00 inhabitants, 12 miles of Philadelphia. Address, J. C. A., 246 Chestnut St., Philadelphia.

**FOR SALE**—In the western suburb of Montreal, four greenhouses, dwelling, stock and good sized lot. H. & T. WARE, 8 Phillips Square, Montreal, Can.

**FOR SALE**—Greenhouses and stock, in fine condition, located near Chicago, or would take a good partner at reasonable price. For particulars address Q, care American Florist, Chicago.

**FOR SALE**—Greenhouse in a good town of 5,000 population; good trade; gas for fuel; size of lot 19 x 90; near the square. Cause for selling sickness. Mrs. S. H. CASKEY, Greensburg, Ind.

**FOR SALE**—Greenhouses, stock and fixtures on easy terms; also ground and house for sale. Rare chance for enterprising young man. Splendid reference in both plants and cut flower production. Address A. R. STARK, Joliet, Ill.

**FOR SALE**—Two greenhouses \$15 each, with office 20 x 15, fine retail location in center of Chicago. Everything in first-class running order, will be sold at a reasonable price for cash. Address, MACK, care American Florist, Chicago.

**FOR SALE**—Just building two new greenhouses, and stock of an old established business for a large trade, for sale cheap. Will sell ground also, give as long lease as wished, and at easy terms. Located in a live, booming western city of hundred thousand inhabitants. Address, B. S. care American Florist, Chicago.

**FOR SALE**—In the city of Atchison, Kansas, three greenhouses and stock of an old established florist business, heated throughout with Hitchings & Co.'s No. 10 hot water boiler; three thousand feet of glass, full stock of plants, dwelling, horse sheds, well, cistern, &c. City water, electric lights and telephone; situated on the main thoroughfare and street car line, 124 feet frontage. Must be sold at once on account of failing health. For particulars, address, SANFORD, KEITH & HENDERSON, Real Estate Dealers, Atchison, Kan.

**FOR SALE**—The undersigned offers her entire establishment, consisting of a large garden with two large greenhouses provided with hot water furnaces, one dug well of good water; water supply by hydrants; dwelling, barn and out-houses, all nearly new. Five acres of land under high cultivation, garden implements, horse, wagons, cut hay, &c. A large stock of seeds, plants, shrubs, &c. &c. The above is situated within the city, of easy access, and the offer is in fact a rare opportunity for a live, energetic gardener, as the business is well established and remunerative. Cause of disposal the death of my husband. Parties desiring to purchasing will please address for particulars, MAGDALENA DILGER, Eau Claire, Wis.

**FOR SALE OR RENT**—A rare chance for a practical florist to buy or lease a first-class brick-sole greenhouse 24 x 62 feet, with barn and packing-rooms attached 25 x 40 feet, a large garden and abundance of water. At a small cost, a residence and a double span greenhouse can be fitted up out of the walls of a brick building 25 x 40 ft., belonging to said it is located in central New York, in a town of 5,000 population and surrounded by several thriving villages. No florist located nearer than 40 miles in any direction. The greenhouse contains a good stock of plants and pots, also force-pump, hose, tools and implements, and is heated by a Hitchings No. 14 Corrugated Boiler and ten lines of 4-inch pipes entire length. The boiler stands in a large grouted stone hole, a brick and cement cistern in the center of greenhouse. Terms easy. For further particulars, address Box 257, New York City.

### IMPORTED H. P. ROSES.

Worked low on the Manetta Stock, offer the best results to the florist, budding freely and giving plenty of cuttings for propagation quite early. Fine plants for sale by the 100 or 1,000, at low rates. Address

WILLIAM H. SPOONER,  
JAMAICA PLAIN, (Boston), MASS.

### ROSES.

Wishing to close out the balance of our forcing roses to make room for new propagation we are offering the following plants, which are in splendid condition, at

### Extremely Low Prices.

PAPA CONTIE, 3-in., 4-in., 5-in.

THE BRIDE, 2½-in., 3-in., 4-in.

BENNETT, 2½-in., 3-in., 5-in.

PERLES, BON SILENE, NIPHETOS, SOUV. D'UN AMI, PURITAN.

Write for Prices.

B. A. ELLIOTT CO., Plantmen,

Pittsburg, Pa.

### OUR SPECIALTIES.

### NOVELTIES IN ROSES

### AND OTHER PLANTS.

— ALSO —

### FLORISTS' STOCK FOR FORCING.

### HILL & CO.,

RICHMOND, IND.

### THE NEW ROSES,

American Beauty, Bride, Her Majesty, American Beauty, The Beauty, Mermont, Perle.

Also good plants of the best leading varieties of Teas, H. Teas, H. Perpetuals and a general collection of greenhouse and bedding plants at a very low price. Send for prices.

JACOB SCHULZ,

1325 E. Broadway, Louisville, Ky.

### ROSES. — 20,000 YOUNG ROSES

In 2-inch and 2½-inch pots in fine condition of the following varieties:

American Beauty, The Beauty, Mermont, Perle, Niphotos, Bennett, Pierre Guillot and La France. For prices, apply to GARFIELD PARK ROSE CO.

1038 W. MADISON STREET, CHICAGO.

### ROSES.

Cooks, Mermonts, S. d'Ami, (4-inch pots).....	\$ 8.00
Bon Silene, Adam, Safrano, (3-inch pots).....	5.00
Mad. Waterville, (4-inch pots).....	10.00
Jean Sisley, (3-inch pots).....	6.00
"Cusid, (4-inch pots).....	12.00
Brides, 3-in. and 4-in. (4-inch pots).....	\$8.00 and 12.00
Cooks and Mermonts, one year old, strong, 4-in. and 5-in. pots.....	\$10.00 and 15.00
SMILAX, strong plants, 2½-in. pots, \$3.00 per hundred; \$25.00 per thousand.	

### CARNATIONS.

Peerless, Edwards, Hinz's White, Portia, Jas. Garfield, Mrs. Garfield, Hindsdale, Crimson King and Maurandia, field grown, \$5.00 and \$8.00 per 100. Fred Johnson, The Century, Allegator and Sunrise \$10.00 and \$12.00 per 100.

L. C. WOOD & BRO., Fishkill, N. Y.

### BUDDED ROSES

For Winter Forcing or Spring Market Sales.

In excellent condition, large two year old bushes, grown out doors, in all the leading varieties of

### HYBRID PERPETUAL AND TEAS.

Ready for shipment on and after October 1st.

CATALOGUE AND PRICES ON APPLICATION.

TERMS: Cash with order.

### SCHULTHEIS BROS.,

Rose Growers,  
COLLEGE POINT, L. I.



## The Cut-Flower Trade.

## California Flowers.

EDITOR AM. FLORIST.—I am sure that you have written thrice in your foot notes to "California Flowers" (page 490), and I would not willingly give you credit for mistaking a supposition for a fact. Your conclusions are possibly drawn from a few weeks' hasty observations in our state, which are sometimes misleading.

Three or four years ago the idea of California fruits competing in the Chicago markets was "pooh-poohed." Two years ago the delicate fruits could not be shipped so far, but cold storage now places the daintiest of fruits in your markets in the best of condition. Two years ago I, like other eastern florists, thought out-door flowers worthless for shipping, and so they are back east, but here the conditions are altogether different. Last winter I proved to my entire satisfaction that the shipping of out-door flowers to St. Louis, Kansas City, Chicago, etc., was a success; the flowers were worn at parties and operas in the above cities.

I admit that in some parts of California the flowers are "great in quantity but poor in quality," but in other parts they are fully equal, if not superior, in every way to those grown in Chicago, and though grown out of doors, will keep and ship better. We do not claim that all flowers grown out of doors will ship well, nor do we expect to ship any but the soundest and most perfect blossoms. Mornets, La France, Mar, Neil, M. Van Houtte, Malmaison, Paul Neyron, orange blossoms, violets, tuberoses, carnations, ferns, smilax, have been shipped across the continent with perfect success.

It is no wonder that California has been a long way behind in the culture of flowers, but now "the mists have rolled away," and floriculture will soon be one of the brightest gems in the crown of our royal state. Ah! the revolution will soon come, and none will welcome it more heartily than the editor himself. There will be no more club heads, off color, under size or poor grading and packing to worry the commission man; flowers will have to be in good shape, or not at all. Look at your fruit stands, and you will see what California has done in the way of revolution. Some florists are too slow and shiftless for this world or the next; let them wake up from this Rip Van Winkleish stupor. California may yet be a blessing in disguise.

EMORY E. SMITH.

[While we have not the least desire to belittle California's chances in the above direction, we have not the least faith in a successful issue of these plans; however we give the letter and will leave Mr. Smith the "glorious climate" and the future as a combination of three to work out all there is in it, believing that we shall all hear of it very quickly when he succeeds.—Ed.]

WORKED ROSES.—A dozen Niphetos buds cut from plants worked on Manetti a year ago, have been received from Mr. M. E. Page, Forest Glen, Ill., as showing the value of Manetti under Niphetos. The blooms received were certainly excellent for this season of the year.

PREPOT, ILL.—Wm. Mennig has sold out his business to Gardner Bros., of this place.

## Boston.

At the annual meeting of the Gardeners' and Florists' Club M. H. Norton was elected president; Jas. O'Brien, treasurer, and David Welch, secretary. Ten new members were added to the list.

The nominating committee of the Mass. Hort. Society has renominated last year's ticket with a few minor changes. Great preparations are being made for the annual exhibition, which in connection with the exhibit of the Pomological Society promises to be one of the finest displays ever seen in this country.

Two more of the old familiar faces have gone from among us. The name of C. H. Hovey is already well known everywhere in this country among fruit and flower lovers, and but little can be added to what has been already written concerning his useful life and his successes as a horticulturist. Mr. Hovey was in his time the foremost man in his chosen field. His death is the fifth of ex-presidents of the Mass. Hort. Society who have died recently.

Mr. Emund Smith of Cambridge, a well-known florist, died Sept. 5, at the advanced age of 80 years. Mr. Smith has carried on his business for the past twenty-five years in the old-fashioned manner. Making up a large basket full of low-priced bouquets early in the morning he would start for the city and personally dispose of them among the offices on State street and about the custom house, where he had many regular customers whom he has supplied for years. He accumulated a fortune in this manner, but his wealth and his age could not prevent him from taking his daily trips, which he continued up to the last.

It is interesting to compare the lives of two such men. Mr. Hovey was all that brains, horticultural research and love for his business could make him, and doubtless his accomplishments and his record were to him a greater source of pleasure than wealth could have been. Mr. Smith, with little horticultural education, and caring nothing for it, patiently plodding on, selling his bouquets year after year, and gradually amassing a fortune popularly believed to be over a quarter of a million, represents the other extreme of the business. There has been some discussion in the columns of this paper recently on this subject. These two men well represent the two sides of the question.

W. J. S.

## Trade Notes.

NILES, MICH.—W. M. Goldie has leased his greenhouses to A. Moor.

GRAND ISLAND, NEB.—J. M. Roman has started a cut flower and plant business here.

LINCOLN, NEB.—Doran & Roman have dissolved and closed their greenhouse business here.

DAVENPORT, IA.—F. L. Bills is building two houses; C. Dannacher and F. C. Bahr one each.

PHILADELPHIA.—Miller & Yates, 5774 Germantown avenue, have dissolved. Mr. Miller retires, and the business will be carried on under the firm name of David G. Yates & Co.

TORONTO, ONT.—H. C. Butterworth of the "Victoria Greenhouses" has this season added two new rose houses 140 feet long, heated by hot water. Mr. B. is a very successful grower of roses.

JACKSONVILLE, FLA.—The State Nurserymen's association met here Aug. 10. Permanent organization was effected. The next meeting will be held at Ocala on the second Tuesday in April next year.

ST. LOUIS.—Thos. Murnane of this city has for the last three months been engaged in laying out a handsome park of six acres in the town of West Eldorado, Mo., which is located near Eldorado Springs.

BATTLEBORO, VT.—C. E. Allen is building a new house 100 x 20. An unusual amount of rain has fallen in this section during the summer. Crops generally good, except potatoes, which will be light.

BALTIMORE.—Mrs. M. J. Thomas is erecting a very substantial new greenhouse 110 x 24 in best modern style, for palms and other decorative plants on her new place—The Highlands—adjoining the residence of her father, Robert Halliday.

COLUMBUS, O.—The State Hort. society held an enthusiastic and profitable meeting here Sept. 1, the attendance being very large. It was decided to hold the next annual meeting in December at Toledo. Three delegates were chosen to represent the society at the annual meeting of the American Pomological society which occurs in Boston this month.

PHILADELPHIA.—EVANS & BATTLES have opened a very pretty cut flower store on Twelfth street below Chestnut. It is said that when Edwin Lonsdale gets his new place in shape he will have one of the finest places in the country. Craig's new Gontier house is simply enormous. From present outlook there will be no scarcity of well grown roses in Philadelphia this winter. The Florists' Club is considering the question of making a fine display in the constitutional parade Sept. 16.

MILWAUKEE.—Mr. Joseph Pollard who held the position of gardener to the late Alexander Mitchell for over twenty years, retires from his position October 1. It is with much regret that Mr. Pollard's many friends learn of his retirement from the management of the large and beautiful place he has built up and watched over with such care and pride for so many years. Mr. Pollard has not yet made any other engagement, though it is his intention to do so as soon as a suitable opportunity offers. The greenhouses and conservatories pass into the hands of Currie Bros., under an arrangement with the owners, to keep up the place.

ANARVLIS HALLII is in flower here in several places. It is a comparatively scarce plant, and was very little known till it was shown in September, 1882, at the exhibition of the Massachusetts Horticultural society, Boston. In manner of growth it is like A. belladonna; the foliage is produced in May, and the flower stem in August, which is crowned with six or eight flowers about three inches in diameter, of a beautiful rose color, each petal tinted with blue. It is perfectly hardy and increases very quickly. It is well worthy of a place in every garden. It is only offered for sale by a few florists, and it always finds a ready sale at good prices. I believe it was brought from China by a Dr. Hall, and planted out on a gentleman's place at Plainhaven, Mass, where it increased very quickly, and was sold to a florist in Boston, but has never become common.

JOHN RENNEX.

New Bedford, Mass.

**THE AMERICAN FLORIST**

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 Cents a Line, Agate;  
Inch, \$1.40; Column \$14.00.  
Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per  
cent; 12 months, 20 per cent.  
No reduction made for large space.The Advertising Department of the AMERICAN  
FLORIST is for Florists, Seedsmen, and dealers in  
wares pertaining to those lines ONLY. Please to  
remember.Advertisements for October 1 issue must  
REACH US by noon, Sept. 24. Address,  
**THE AMERICAN FLORIST CO., Chicago.****Light Watering as a Cure for Disease.**

To withhold food as a cure for disease has become a recognized treatment, not only for the human body, but also for the plant, which is so like it in many of its requirements. Some time back my attention was first directed to this theory as applied to plants by a passage in "Practical Floriculture." I think, in which the author advises the keeping of plants dry as a cure for disease. With successive years the conviction has deepened that this simple remedy in experienced hands will prove successful in the majority of cases needing its trial.

The trouble, however, is that florists generally are afraid to use this means for the recovery of healthy vigor. To keep a plant continually dry is considered a sure way of killing it. When a man is sick he is supposed to be in a very bad way should he refuse the food which is constantly pressed upon him, but which nature, the true healer, constantly refuses. When the plants in our houses become sick through over-feeding, they are still given the same quantity of water day after day, until the enfeebled constitution can no longer bear the demands upon it, and the plant dies. But let only sufficient water be given to prevent the plant from dying of drought, and a more healthy condition will soon be manifest. Some plants will endure a severer drying than others. An experienced eye can soon detect when water *must* be given. No inexperienced or careless man will succeed with this treatment, for such will, through ignorance or neglect, effectually destroy the plants they intend to help.

Roses carried over through the summer and intended for another winter's forcing are especially benefited by this method. But many, hearing that roses should have a rest, err greatly as to the means they adopt to enforce this rest. How often have we seen roses given a resting period, which resulted in covering them with red spider and mildew! It is safe to assert that plants so abused will never produce satisfactory results. Resting should not be productive of disease, but a means to contract it. Some may say, "If we are not to use water, how can red spider, etc., be avoided?" It is not stated that water must not be used, only that it must be employed sparingly and with judgment.

No rule can be given as to when diseased or weakened plants may receive more water. Signs of recovered health can soon be observed by a watchful eye. Fresh roots will make their appearance, and the dried-up look of the dormant eyes will quickly change to a more plump aspect, soon to develop into vigorously growing shoots and leaves.

A. E. WHITTLE.

Albany, N. Y., Sept., 1887.

**Wholesale Markets.****Cut Flowers.**

	BOSTON, Sept. 10.
Roses, Teas.....	\$1.00
" Perles, Niphotos.....	1.00
" Mermets, La France.....	1.00
" Bennetts, Niels.....	6.00
" Am. Beauties.....	8.00
Lily of the Valley.....	6.00
Gladiolus.....	1.00
Asters.....	1.00
Smilax.....	12.50
Adiantums.....	1.50

	NEW YORK, Sept. 10.
Roses, Perles, Niphotos.....	\$3.00
" Dukes, Souvs.....	3.00
" Mermets, Bennetts.....	3.00
" Bon. Safrons.....	10.00
" Am. Beauty.....	1.00
" Gontiers.....	1.00
" Bon Silens.....	1.00
Carnations—Long stems.....	1.00
Short.....	15.00
Smilax.....	25

	CHICAGO, Sept. 12.
Roses, Perles, Niphotos.....	\$1.00
" Mermets, Bennetts.....	5.00
" Bon. Safrons.....	2.00
" Am. Beauty.....	12.50
Carnations.....	1.00
Smilax.....	20.00

	PHILADELPHIA, Sept. 10.
Roses, Teas.....	\$1.50
" Perles, Niphotos, Bennetts.....	3.00
" Mermets.....	3.00
" Brides, La France.....	1.00
" Cooks.....	6.00
Carnations, Heliotrope.....	15.00
Smilax.....	2.00
Tuberose stalks.....	2.00
Gladiolus.....	2.00
Callas.....	10.00

Business improving.

If you want **FRESH FLOWERS** of best quality, carefully packed and promptly shipped, order from

**WM. J. STEWART,**

67 Bromfield Street, Boston, Mass.

**W. S. ALLEN,**

Wholesale Dealer in

**CUT FLOWERS,**

Has moved from 940 Broadway to 35 East 34 St.

**W. S. ALLEN,**

36 EAST 23rd STREET, NEW YORK.

**JOHN KEYES,****WHOLESALE - FLORIST**

No. 11 West 27th Street,

Near Broadway, NEW YORK.

Consignees of the principal growers about New York.

Lilies of the Valley and Lilies at all times.

**JOHN J. PERKINS,**

Wholesale and Commission

**FLORIST**

69 West 28th Street.

(Telephone No. 673, 59th St.) New York

Branch, 34 S. 16th St., Phila., Pa.

Greenhouses, Creskill, N. J.

**W. F. SHERIDAN,****WHOLESALE FLORIST**

721 SIXTH AVENUE, N. Y.

Mention American Florist.

**CHAS. E. PENNOCK,**  
**WHOLESALE FLORIST,**  
38 So. 16th Street, Philadelphia, Pa.**EVERY FLORIST**

Should have our

**New Trade Directory.**

ADDRESS,

**AMERICAN FLORIST CO.,**

CHICAGO.

**Thos. Young, Jr., & Co.,**  
**Wholesale Florists,**

INCORPORATED 1885,

23 West 23d St., NEW YORK.

**J. C. VAUGHAN,**  
**WHOLESALE CUT FLOWERS**

Direct all cut flower orders to cut flower department

VAUGHAN'S SEED STORE, 42 La Salle St., CHICAGO.

**WELCH BROS.,**  
**WHOLESALE FLORISTS,**  
165 Tremont Street, BOSTON MASS.We make a specialty of shipping choice Roses and other Flowers, carefully packed, to all points in Western and Middle States.  
Return Telegram is sent immediately when it is impossible to fill your order.**HAMMOND & HUNTER,**

Wholesale dealers in

**Cut Flowers and Florists' Supplies**

61 West 30th Street, NEW YORK.

**LaRoche & Stahl,**  
**Florists & Commission Merchants**

—OF—

**CUT FLOWERS,**

1237 Chestnut Street, PHILADELPHIA.

Consignments Solicited. Special attention paid to shipping. Mention AMERICAN FLORIST.

**C. STRAUSS & Co.**

Telephone 977-3.

WASHINGTON, D. C.

Grower of and Wholesale Dealers in

**ROSES and OTHER CUT FLOWERS**

1000 Puritan Planted for coming Winter.

**CUT FLOWERS**

The choicest Cut Flowers at lowest market rates shipped C. &amp; D. Telephone connection. Use A. F. Code when ordering by telegraph. For prices, etc., Address,

**J. L. DILLON, BLOOMSBURG, PA.****ROSS & MILLANG,**  
**Wholesale Florists,**

NO. 1168 BROADWAY,

(Formerly at 225 5th ave.)

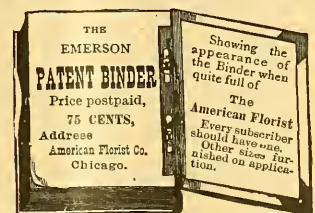
Bet. 27th &amp; 28th sts. NEW YORK.

**A. M. & J. B. MURDOCH,**  
**WHOLESALE**  
**CUT FLOWERS.**

510 SMITHFIELD STREET,

PITTSBURGH, PA.

SEND FOR PRICE LIST.





### Roses on Stocks vs. those on Own Roots.

Judging from the interest taken in this subject at Chicago after hearing Mr. Anderson's valuable paper, it may not be out of place to review the points at this time, particularly as a great many growers cannot quite reconcile the differences of opinion there expressed.

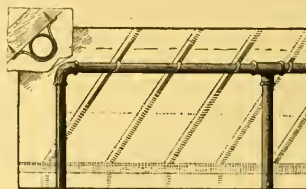
What is the principal reason for budding or grafting roses? Principally to produce a larger plant in a given time, and certainly where this is the only consideration this method has considerable advantage over the plant on its own roots; but outside of this consideration I have never yet seen any advantage in either budding or grafting the rose. I say this conscientiously after more than thirty years' careful study and experiments with roses in almost every class of soil and on all the recognized best varieties of stocks. I do not wish to infer that it may not be desirable to bud or graft roses in some particular cases, or for certain places or some particular varieties, but what I do want to say is that for much the larger proportion of roses grown in this country they are very much superior on their own roots—be they teas, hybrid teas, or hybrid remontants—for forcing under glass or for planting in the open ground for summer blooming only.

While the worked plant will in a good many cases make a larger plant in a given period than the average own root plant, yet if planted side by side in a greenhouse and given equally good treatment, the own root plant will in nine cases out of ten outstrip the worked plant, both in size and quantity of bloom. To all who doubt this I would simply say try it for yourselves; not by taking a poor weak plant propagated from a plant which has been virtually propagated to death, but plants which have been propagated from clean, healthy, vigorous stock—for herein lies the whole secret, if there be one. If from a healthy maple tree growing in an open lot you cut nearly all its best vigorous shoots four or five times during the summer, you will almost kill the tree. This is just what a great many people are doing with their roses every season, till finally they almost refuse to grow at all. In such cases the best eyes are selected and budded with the results above described; but it is certainly no fair test of the relative merits of the two systems.

I am convinced that the cry of deterioration in the health of our forcing roses is more attributable to this cause than anything else. I have to-day growing in my houses plants of most of the leading varieties which have been propagated from the same stock for the last eight years, and during that time I have every year imported from different sources quite a number of each sort on different kinds of stocks, and after growing them for a season propagated from them, yet I have never seen a single case where these have been in any way better than the plants raised from my original stock, and in no instance have these imported plants ever produced as fine or as many flowers the following winter as those on own roots. Of all the stocks tried the seedling Brier is the least satisfactory, while next comes the Manetti. Another great drawback to stocks is that plants on them are much more subject to black spot; I have a remarkable instance of this here now. In working out some experiments this spring I budded some Beunetts on Manetti stocks; to-day every plant is badly

affected with black spot, while others on their own roots, growing on the same bench, are hardly touched with it, though I doubt not they soon will be, for this disease is undoubtedly contagious. American Beauties budded on this stock last year behaved the same way. On a recent visit to Hill & Co.'s place in Richmond, Ind., I noted the same thing to a very marked extent there, while plants on own roots, growing right alongside, were in perfect health. Mr. E. G. Hill is very emphatic in his opinion that the stock is the cause of the black spot.

But to return to the subject of stocks versus own roots. For the open ground I consider that the plant on its own roots has a very great many advantages over the worked plant. To put it in the words of one of my customers in the west, "Every tub is better to stand on its own bottom." In many, very many, cases where an amateur buys a dozen or two



IRON PIPE PURLIN.

roses that are budded, they bloom perhaps fairly well the first season, and by fall they flatter themselves how well their rose bushes are growing, but it is almost invariably the stock, and not knowing the difference, it is allowed to grow on in all its glory. The next season the result is an abundance of foliage but very little bloom. By the third season it is all bush but no roses, and the party who sold the roses comes in for a large share of abuse, and in many cases to my knowledge the buyer gives up growing hardy roses in disgust. This is working entirely against the florist's best interests; if he sells a customer plants and they turn out good, that customer will be encouraged to buy again, and continue doing so; and no matter who plants a hardy rose on its own roots, if it gets reasonable attention, it will continue to improve every season, and although it may not be quite so large the first year, yet in the end it will give very much more satisfaction. I have yet to see the case where hardy roses planted on own roots did not produce as fine or finer flowers than the budded plants under the same conditions.

That there is a great deal of misconception about the growth of this class of roses on their own roots cannot be doubted. One nurseryman of large experience in Rochester, N. Y., wrote me some time ago that Mabel Morrison, among others named, would not grow on its own roots. I have a bunch of this variety on own roots planted this spring from small pots which have canes now nearly four feet long, and so it is with most of the so-called shy growers. In all the trials I have made of stocks suitable for tea roses I certainly prefer the Banksia to any. It is almost evergreen, grows very well in almost any kind of soil, and is very vigorous rooted, which are the essential points required for forcing tea roses. The varieties of hybrid teas also do well on this stock. In conclusion I would advise those who can to try some plants

of several varieties budded and others on own roots alongside of them next season; watch them and note carefully the results till the end of the season. They will then be the better able to judge for themselves which is most suitable for their particular purposes. During the time I was in Chicago I saw one place where the grower talked all budded plants on Manetti stock; said he did not believe in anything else; but what struck me as rather strange was that one of the finest houses on the place was one of La France on their own roots—a direct contradiction of his own pet hobby. While not wishing to dispute that gentleman's views, I think it much more satisfactory to us all to give actual facts rather than to show only one side of a question. A discussion of this subject through the columns of the FLORIST will, I think, bring out many valuable points and be of great value to us all. JOHN N. MAY.

Summit, N. J., Sept., 1887.

### Iron Purlins.

Noticing your illustration and comments on greenhouse purlins in a recent issue, would say I agree with you and have abandoned the use of wood for that purpose. I now use iron pipe, having it cut at the shop—furnishing the pipe myself—and it is delivered ready to be put together. I have it cut in sections of say six feet; the sections are then connected with "T" fittings, into which we screw the supports, which are set on bricks. The purlin is secured to the rafters by clippings of sheet iron bent around the pipe and secured with screws.

I find 1-inch pipe supports, six feet apart, quite sufficient for an ordinary 12-foot rafter, and makes the neatest and cleanest arrangement I have seen. It makes no shade and affords no lodgement for water or dirt, and of its durability there can be no question.

JOS. KIFT.

### Plant Notes.

**YUCCA ALOEFOLIA GIGANTEA.**—A specimen twenty-three in height is now in bloom in the conservatory at South Park, Chicago.

**FANCY CALADIUMS.**—When repotting my fancy caladiums this year I used iron filings mixed with the soil, and the result has been unusual brilliancy of color. I find it very beneficial to all plants of variegated foliage. A. W. M.

**FICUS ELASTICA.**—This is readily propagated at the Lincoln Park greenhouses, Chicago, by nearly cutting off a shoot and binding the cut with sphagnum moss in which the roots quickly form. After rooting the shoot is cut from the plant and potted.

**EUPHORBIA JACQUINIFLORA** used to be grown rather extensively, but it seems to be somewhat neglected lately. It should be grown by all florists using their own flowers, as it comes in at the right time, and makes up prettily in baskets. To be grown well, the shoots should be pinched during the growing season.

**EL DORADO MARIGOLDS** are five to six feet high. I stake them as I do dahlias or any other top-heavy plants. What capital things they are to bloom! As soon as you notice that a plant is single-flowered, root it out. As a flower it is useless, and if you wish to save your own seed, it has an evil influence on the double flowers.

**VIOLETS.**—When these are lifted in the fall, to be brought inside there is usually quite a number of buds and flowers upon them. These are seldom, if ever, of much use, being inferior in size and color. Some benefit will be derived if they are all pulled off, with the runners; these will grow vigorously, and the second crop of flowers will amply repay for the loss of the first.

**COLEUS.**—The best method of propagating these where large quantities are desired is to take cuttings now from bedded plants and root them in a propagating frame. When rooted pot into 2½-inch pots and plunge into another frame where they may be kept till October or first of November as the weather permits, when they should be removed to the greenhouse for the winter. About the middle of December repot into 3-inch pots; from these plants take cuttings in March and throw the stock plants away.

**STOCKS FOR TEA ROSES.**—After twenty-five years' experience with all kinds of stocks, I consider the following to be the best stocks for tea roses: 1. Madame Trotter; 2. America; 3. Banksia, the large white flowering southern hedgerose; 4. La Marque. With me Cornelia Cook does best budded on Marechal Neil, which is in turn budded on Banksia. M. Niel does well on both Banksia, Trotter and America. I have roses which have bloomed continually both winter and summer for the last ten years.

G. GEDULDIG.

Norwich, Conn.

## CARNATIONS.

1,500 SNOWDON,  
500 GARFIELD.

For sale by

**R. J. DONOVAN,**  
HAVELOCK P. O., ILL.

## CARNATIONS, CALLAS, ROSES.

And other Fall Stock.

Carnations, extra strong clumps, from open ground. Hinde's White, F. Henderson, Fro. Garfield, &c. .... \$ 8.00  
Hydrangea—Otakia, Thos. Hoge, &c. strong, 3-in. and 4-in. pots, ..... \$8.00 and 10.00  
Callas Ethiopias—Extra strong, 4-in. pots, ..... 8.00  
Bouvardias—double & single, best sorts, clumps 100  
Passions, new, Constance Elliot, strong 1½ in. 7.00  
Roses—Marechal Niel, extra strong, ..... 5.00  
Other plants suitable for fall trade, at Lowest  
Prices. **PAUL BUTZ & SON, Newcastle, Pa.**

## FOR SALE.

Strong plants of Swanley White Violets 75c. per two doz.; \$5.00 per 100; \$25.00 per 1,000. Marie Louise, 30c. per doz.; \$2.50 per 100; \$20.00 per 1,000. 800 dwarf, bushy Bouvardias—A. Neuner and other mixed varieties, in 3-inch pots, \$1.00 per doz.; \$5.00 per 100. Double White Hollyhock seed, new crop, 50c. per oz.; Double Yellow, \$1.00 per oz.

M. TRITSCHLER & SONS, Florists, Nashville, Tenn.

## FOR SALE.

### THE CUTS

USED IN ILLUSTRATING THIS PAPER.

Write for prices on any which you have seen in previous issues and would like.

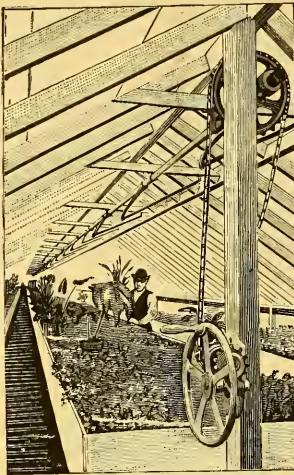
**AMERICAN FLORIST CO.**

CHICAGO.

## HALES' MOLE TRAP

For destroying ground moles in lawns, parks, gardens and cemeteries. The only PERFECT mole trap in existence. Guaranteed to catch moles where all other traps fail! Sold by seedsmen, Agricultural Implement and Hardware dealers, or sent by express on receipt of \$2.00 by H. W. HALES, RIDGEWOOD, N. J.

## Challenge Ventilator.



Without a rival either in Cost, Speed in operating or Security in case of storms.

No Liability to Break or get out of order.

Simple in construction, perfect in operation. Parties wishing estimates will be cheerfully furnished with the same on application. In all cases, please give the following dimensions:

- 1st. Give the length and depth of sashes.
  - 2d. Number of sashes to be lifted.
  - 3d. The length of the house.
  - 4th. The height from the walk to comb of the roof.
- For estimates, prices, or further information, address.

**QUAKER CITY MACHINE WORKS,**  
RICHMOND, IND.

ONLY POTTERY MAKING A SPECIALTY OF

## FLOWER POTS

FOR FLORISTS.

THE WHILLDIN POTTERY CO.,

713 & 715 W HARTON ST.,  
PHILADELPHIA.

## SYRACUSE POTTERY

READY PACKED CRATES OF POTS

As follows, f. o. b. buyer's risk, cash with order,  
price per crate of 3,500 Thumbs (1½ x 2½-in.)... \$ 8.25;  
2,625 2½-inch, \$ 8.25; 1,875 3½-inch, \$ 7.50;  
1,125 4-inch, \$ 6.75; 630 4½-inch, \$ 4.75;  
320 5-inch, \$ 4.40; 160 6-inch, \$ 3.50;  
129 4-inch, 125 5-inch, and 89 6-inch, for \$ 3.50;  
Freight greatly reduced; Chicago only 75c. a crate.  
Other Illinois points only 85c. to 95c. a crate. Samples 13 sizes given with first order. Ask for freight rates and "Safe Delivery" prices. Orders filled instantly. Large stock of 20 sizes. Nine fast frt. lines.  
J. N. PERKINS, Manager, Syracuse, N. Y.

## GROWTAGE'S PATENT BUILDING FOR HORTICULTURE



—GLAZED WITHOUT PUTTY.—  
Endorsed by the New York Horticultural Society.  
Illustrated Circular mailed on application.  
Plans and estimates given for every description of Horticultural Buildings.

**H. J. GROWTAGE,**  
76 Myrtle Avenue, BROOKLYN, N. Y.

## PATENT PLANT BED CLOTH.

SUBSTITUTE FOR GLASS ON  
HOT-BEDS, COLD FRAMES ETC.



Equal to Glass Sash, at one-tenth the cost. Protects from Frost; allows healthful ventilation, promotes hardhood and rapid growth; keeps beds warm. Widely known and used all over the United States by florists and gardeners.

Three grades, price by the piece, 3 cts., 6 cts. and 9 cts. per yard, 36 inches wide.  
Don't Shrink or Decay rapidly. (Discount on hale lots). Circulars and samples free by mail.

**U. S. WATERPROOFING FIBRE CO.,**  
56 South Street, NEW YORK.

## GREENHOUSE SYRINGES.

Three New Patterns. Low Prices. Good workmanship. Twenty-one other varieties. Length of Barrel, 18 in.; Diameter, 1½.



No. 10. No. 10—Conical Valve syringe, full size, two Spray Roses and Jet. Side attachments.  
No. 11—Open Rose Syringe, full size, two Spray Roses and Jet. Side attachments.  
No. 12—Open Rose Syringe, two Spray Roses and Jet. Side attachments.  
These Syringes are made with special reference to those who desire a low-priced working Syringe. Every Syringe we make has our name and address on the Barrel. Manufactured by  
**ROBT. T. DEAKIN & CO.,**  
12th & Buttonwood Sts., Philadelphia, Pa.

## Conservatories

### GREENHOUSES, ETC.

Erected in any part of the U. S. or Canada  
Glazed on the

Helliwell Pat. Imperishable System

OR WITH PUTTY.

For further testimonials, illustrated catalogue or estimates address

## JOSEPHUS PLENTY.

HORTICULTURAL AND SKYLIGHT WORKS.

Offices, 144 Pearl Street, NEW YORK.

## FOR SALE.

One Locomotive Boiler, 25-Horse Power, Hot Water attachments.

One Locomotive Boiler, 25-Horse Power, Steam attachments.

2500 feet 4-inch water pipe. Lot water pipe fittings.

## HENRY A. DREER,

714 CHESTNUT STREET,

PHILADELPHIA, PA.



## Chicago.

Miss F. L. Vaughan has returned from a four months' trip to Europe.

H. F. Halle has bought out J. F. Klimmer at 548 West Madison street.

Henry A. Weaver contemplates erecting extensive rose houses at Irving Park next spring.

At the last meeting of the Florist Club, Battery D, on Michigan avenue, was selected as the place to hold the plant and flower show in November. This building is a splendid one for the purpose, being very light, can be readily heated to any required temperature in case of cold weather, and is large enough to hold enough stock to make an immense show. Meetings of the club will be held every Friday evening hereafter until all matters pertaining to the exhibition are arranged.

Mr. Otto Schucht, the Sheboygan, Wis., delegate who was so seriously hurt in jumping from a street car during the convention, is doing much better than was anticipated. Though both limbs were badly crushed, and it was feared that amputation would be necessary, the doctors now state that the chances are excellent for recovery of the use of both limbs, with but a slight stiffness in one ankle. Mr. Schucht has been able to sit up for the last week, and will start for home by boat inside of another week. He is very grateful to the members of the S. A. F. who so generously made up a purse for him at the time of the accident, and attributes his rapid approach to recovery to the excellent surgical attendance he was able to secure with the money sent him by them.

In view of the fact that a number of the local florists are always complaining that people who are not professional gardeners and florists are continually entering the trade, we have looked up the antecedents of quite a few of those in the trade including most of the complainants, with the following result: Out of fifty who are now florists only ten had learned the trade. The remaining forty had drifted into it from the following professions: Carpenter and builder, engineer, architect, feed dealer, bull-whacker, saloon-keeper, coachman, photographer, pattern maker, sailor, fruit dealer, farmer, peanut peddler, theatrical manager, board of trade speculator, tinsmith, tobacconist, contractor, coal dealer, boiler-maker, book-keeper, band leader, undertaker, jeweler, patent medicine peddler, reaper manufacturer, painter, plow maker, civil engineer, stage driver and horse doctor. It will thus be seen that the talent employed in the production of plants and flowers is of a rather diversified character.

## Iowa Florists.

DES MOINES, IA.—The florists of Iowa held a meeting at Floral Hall, in the state fair grounds, on Wednesday, Sept. 7, and organized a state society under the name of the Society of Iowa Florists. This meeting was held pursuant to the action of the Iowa members of the Society of American Florists who attended its last annual meeting in Chicago, whereat a committee composed of Judge C. C. Cole of Des Moines, J. A. Kramer of Marion, and R. L. Blair of Des Moines, were appointed a committee to prepare the constitution and by-laws for a state organization, if the florists should desire it at the meeting. The committee, through Judge Cole, reported the constitution and by-laws, which were unanimously adopted by the meeting, which was fairly well at-

tended, and at which much of enthusiasm in regard to the organization and cordial support of the Society of American Florists was manifested. R. L. Blair was elected president; W. E. Kemble, Oskaloosa, vice-president; J. A. Kramer, Marion, secretary; and Joseph Bancroft, Cedar Falls, treasurer. Standing committees were appointed to prepare programme for exercises at the regular annual meeting, and on securing membership to both the state society and the national. The regular annual meeting is to be held on Wednesday of the fair week, and a special meeting at the time of the convening of the State Horticultural society in the winter. From the feeling manifest at the organization, much good may be expected from this state society.

## FALL BULBS.

HYACINTHUS, named and in colors.  
TULIPS, double and single.  
HYACINTHUS, Romans.  
NARCISSUS, double and single.  
Lilium Harrisii, Lilium Candidum, Lilium Auratum, Lily of the Valley pips and shoots, Freesia Refracta Alba.  
And other fall planting bulbs. Catalogue free.  
A. GIDDINGS, DANVILLE, ILL.

## BULBS.

## LILIUM LONGIFLORUM

EXTRA STRONG BULBS.

Per Hundred ..... \$ 7.50  
Per Thousand ..... 65.00

SAMPLES TO APPLICANTS.

ADDRESS,

R. MAITRE,

7 Camp Street, NEW ORLEANS, LA.

## DUTCH BULBS

ARE NOW IN STORE.

They are in prime order and of better quality than last season's stock.

Our Autumn Trade List has been mailed to the trade, and we trust you will favor us with a share of your orders.

Prices will be found as low as first quality stock can be offered.

HENRY A. DREER,

714 Chestnut Street,

PHILADELPHIA.

ATTENTION FLORISTS!

FIRST QUALITY ONLY.



LILIAM HARRISII,

4, 5, 6, 7 and 8 inches,  
\$8, \$10, \$15, \$20 and  
\$25 per 100.

First-Class SMILAX SEED  
at \$1.50 per oz.

Intending purchasers, be-  
fore ordering, write us for a  
catalogue.

Wm. H. SMITH

SEEDSMAN,

1018 Market St., PHILADELPHIA, PA.

NOVELTY! NOVELTY! NOVELTY!

## SPIRÆA PALMATA ALBA

Awarded a First-Class Certificate in London on the 17th of June, 1885.

Strong Plants, \$36.00 per 100.

A. M. C. JONGKINDT CONINCK,

Royal Tottenham Nurseries, DEDEMSVAART, near Zwolle, NETHERLANDS

THE AMERICAN FLORIST COMPANY'S

## · : DIRECTORY : ·

OF

FLORISTS, NURSERYMEN AND SEEDSMEN

OF THE

UNITED STATES AND CANADA.

1887.

PRICE ONE DOLLAR.

The most complete and accurate list yet published. The key designates the particular branch of the trade each one is engaged in. The street and number of those living in cities will insure the delivery of tons of catalogues which have hitherto remained dead in the office to which they were addressed. At this low price every one in the trade can afford to have a copy for reference. Address

AMERICAN FLORIST CO.

54 LA SALLE ST., CHICAGO.

**BULBS! IMMORTELLS!**

**J. A. DEVEER,**  
(Formerly of DeVeer & Boomkamp)  
Removed to 19 Broadway, NEW YORK.  
SOLE AGENT FOR  
THE GENERAL BULB CO., Vogelenzang, Holland.  
LS. BREMOND FILS. Ollioules, France.

**DUTCH BULBS,**  
Roman Hyacinths, Paper White and Roman  
Narcissus, Lilium Candidum, Freesias, L. Har-  
risii, Longiflorum, etc., for Fall delivery.  
**NOW READY.**

**SPIRÆA JAPONICA.**

Per 100  
FINE CLUMPS..... \$ 6.00  
LARGE " ..... 10.00

**E. SHEPPARD & SONS,**  
224 Fairmount Street, LOWELL, MASS.

**Freesia Refracta Alba.**

**LARGE BULBS.**  
**ROMAN AND ITALIAN**  
**HYACINTHS.**  
**NARCISSUS,**  
**DAFFODILS,**  
**HARRISI,**  
**LILY OF THE VALLEY PIPS, &c.**

For the Fall Trade. Prices on application.

**MICHEL PLANT AND SEED CO.,**

718 Olive St., St. Louis, Mo.

**Dutch Bulbs.**

**R. van der Schoot & Son.**

HILLEGOM (Near Haarlem)  
HOLLAND.

**ESTABLISHED 1830.**

GROWERS OF

Hyacinths, Tulips, Crocus  
Narcissus, Lilies, Etc.

Intending purchasers, before or-  
dering Bulbs, write us for a  
Catalogue.

Mention Am. Florist.

**AUGUST RÖLKER & SONS,**  
NEW YORK.

—Supply the Trade.—

**DUTCH BULBS!**

Catalogues on application.

**C. H. JOOSTEN,**  
**IMPORTER,**

3 Coenties Slip, NEW YORK.

Mention American Florist.

4,000

**EULALIA JAPONICA AND VARIAGATA PLUMES.**  
For Dried Grass Bouquets and Funeral Designs.  
Price, 50c. per hundred, securely packed.

MRS. J. S. R. THOMSON, Spartanburg, S. C.

We have

**FINE STOCKS**

OF THE FOLLOWING:

**CHRYSANTHEMUMS** In Great Variety.

**GERANIUMS** Double and Single, very best kinds.

**HELIOTROPES** 6 Fine Kinds.

**FUCHSIAS** 10 Best Old Kinds.

**FUCHSIAS** 8 Best New Kinds.

**Begonia Metallica. Abutilon Thompsonii Plena.**

Write us if you want any of the above, as all the plants are strong, in fine condition and sure to please.

**V. H. Hallock, Son & Thorpe,**  
**EAST HINSDALE, NEW YORK.**



**READY AUG. 15 to 20,**

A large stock of selected

ROMAN HYACINTHS, LILIUM HARRISII,  
FREESIA REF. ALBA, and a fine line of 15  
varieties forcing Narcissus, dbl. and sgle.

**READY SEPT. 1 to 5,**

Lilium Candidum, large bulbs; also a full assortment of  
Dutch Hyacinths, Tulips, Crocus, &c., from the best Holland  
growers. Select florists seeds, Pansy, Primula, Cineraria, &c.

Send for Price List, now ready.

**JAMES KING,**

170 LAKE ST., CHICAGO.

**F. E. McALLISTER,**

—WHOLESALE DEALER IN—

**Seeds** For the Florist Market, Garden-er and Farmer. **Requisites** Such as Baskets, Im-mortelles, Grasses, Mosses, Boquet Pa-pers, Pampas, etc. **Bulbs** For the Green-house or Gar-den.

22 Dey Street, - - - NEW YORK.

**FULL FALL STOCK**

OF ALL BULBS NOW READY. FREESIA, LARGE STOCK.

**NEW CROP SEEDS,** CINERARIA, CALCEOLARIA, PANSY, and all that are now in season.

**J. C. VAUGHAN, CHICAGO.**

**DUTCH BULBS.**

**BAKKER BROTHERS,**

BENNEBROEK (near Haarlem), HOLLAND.

GROWERS OF

HYACINTHS, TULIPS, CROCUS,

Narcissus, Spireas, etc,

WHOLESALE ONLY. NO AGENTS.

**SMILAX.**

10,000 Strings of Smilax for the trade. Steady con-tracts solicited.

**F. E. FASSETT & BRO.,**  
Ashabula, Ohio.

**Bulbs! Bulbous Roots!**

**HULSEBOSCH BROS.,**

Overveen, near Haarlem, Holland.  
The only growers of whose firm there resides a  
member in the States.

Price list free on application. Address

P. O. Box 3118, New York City  
Hyacinths, fine mixed, per 100, \$3.00.  
Tulips, fine mixed, per 100, \$1.00.

**BULBS! BULBS! BULBS!**

Before placing your order for HOLLAND BULBS  
write me for my trade list. I have made special  
arrangements with some of the largest growers  
in Holland, and can offer you TERMS and  
PRICES better than any other firm does. All  
orders over ten dollars will receive a CREDIT un-  
til May 1, 1888. Write for terms and prices.

**E. HIPPARD, Youngstown, Ohio.**

**1,500 SMILAX PLANTS**

In good, strong, healthy condition at \$6.00 and \$7.00  
per hundred.

**F. H. PIRA, LA GRANGE, ILL.**



## Notes and Comments.

The trade is settling down in preparation for the winter's business after their Chicago jaunt. Certainly the most strictly business-like amongst us must acknowledge that the convention was a success professionally as well as socially; there was plenty of business done, and the windy city bristled with horticultural fairs.

The hail question seems to have taken a fresh grip, so to speak; it is on a much more satisfactory basis than a year ago. Still a good many growers in localities where destructive hail storms are rare will be slow to join, though it is impossible to locate what we misname the hail belt. In point of fact, there is no part of the country where we may be absolutely sure of escaping damage, though the liability is certainly greater in some parts than others. The trouble is that those in the more favored localities are averse to joining because they have a feeling that they may be assessed for the losses of others without ever requiring a similar benefit themselves.

But there is one thing we all want to see next year, and that is a larger exhibition at the convention. It is largely monopolized by the dealers in florists' requisites, and while their displays are both creditable and interesting, we certainly ought to see more growing plants and flowers. This is certainly the very best occasion on which to display novelties in the plant line, and though it might not be advisable on many grounds to offer prizes, certificates of merit might be given when deserved. It would hardly be possible to offer prizes without turning the exhibition into a business show with cash admission, rather than a matter of purely horticultural interest. Of course midsummer is rather an impossible time for a successful flower show, though an interesting display might be made. Such an exhibit ought to consist chiefly of new plants or stuff grown under some novel conditions.

I doubt whether many business men would favorably regard the proposition of horticultural auctions in connection with the convention. Of course there is always a lot of business—personal business—done at these meetings; travelers for many houses find it quite a rich harvest. But a good many regard the auctions with considerable disfavor; witness

the objections made to them at the Philadelphia convention. And the trouble is that if we get in sort of professional side-shows in connection with the meetings, interest in the main object is likely to diminish. It is an occasion when we ought to meet for the advancement of the trade at large, without any thought of personal axe-grinding. It is one of the most difficult things in the world to keep a trade society running without some such objections, and it is greatly to the credit of the S. A. F. that the interest continues to increase as it does.

The night-blooming Ipomoea makes quite a show on the front of Henderson & Co.'s place on Cortlandt street, as far as foliage is concerned; it grows quite luxuriantly, but does not seem disposed to bloom with any degree of freedom, probably for want of sunshine.

One of the lesser seedsmen here has been advertising for agents to sell the "wonderful foreign life plant," one of the most remarkable horticultural wonders, according to the advertisement, being an air plant, which lives for months without nourishment. It proves to be rather a poverty-stricken specimen of house-leek, certainly not equal to the very succulent variety found by the bushel in some old gardens.

Every grower has his own pet prescription as top-dressing or root fertilizer for roses, which he swears by under all circumstances. Rather a novel root stimulant—to me, at least—is the hoofs of sheep, forming a stratum below the soil. Very satisfactory results are produced by this, and the material has the advantage of cheapness, as apparently these hoofs are not used in the glue factories. They appear to be very rich in ammonia, and consequently they are highly stimulating, without the grossness of some other fertilizers which doubtless produce a diseased condition in the plant.

There is little said at present about the autumn show of the New York Horticultural society; if it takes place it will doubtless go in largely for chrysanthemums.

One of our large florists talks seriously of giving a very extensive flower show next month, to be novel in all its effects. We must confess, in sackcloth and ashes, that the shows gotten up by private persons have been much the best of late years. Members of the Florist's Club are discussing the best means of obtaining a

greater display of decorative plants at the shows; the greatest lack is usually in this direction. There is quite a number who could make a display in this direction, but they generally don't. Of course there is always the danger of injury to such plants, and we can hardly expect growers to take such risks solely for the benefit of society at large, but a show is never effective without these specimens.

The street venders are giving us the benefit of wild flowers—golden rod and asters this time; very charming, but not altogether remunerative to the florist. Pretty soon they will begin to swamp the market with autumn leaves. They are still selling that perfumed parsnip seed on Fourteenth street, under the title of "attar of rose seed," and a great many buy it, with a confidence in human nature truly refreshing.

Most of the florists are complaining terribly of the dull season—always the case in midsummer. Our friend Mr. Le Mout, who does not seem affected by a perceptibly dull season, has been occupying his leisure with some ingenious little inventions not entirely connected with horticulture.

We have the prospect of several new carnations, as a sort of compensation for a season singularly devoid of novelties; we have not had to pass judgment on a really new rose for several months.

EMILY LOUISE TAPLIN.

**HYBRID CINERARIA SEED.**

I have some seed saved from the choicest varieties. Have more than 1 require and will sell at lowest price, or trade for plants.

JOHN B. FABER, FLORIST,  
KANKAKEE, ILL.

**Wholesale Seed Growing House.****MARTIN GRASHOFF,**

QUEDLINBURG, GERMANY.

I have great pleasure in introducing next autumn the following

**NOVELTIES OF FLOWER SEEDS.**

1. PHOX DRUMMONDI FIMBRIATA.—Flower fringed lacinated, white margined.
2. PHLOX DRUMMONDI FIMBRIATA, var. Cuspidata.—Flower deeply lacinated, white margined, with five long pointed teeth.
3. SALVIA COCCINEA, var. Lactea.—Pure milk-white.

25¢ Engravings will be sent free on application.

✽ ORDERS ARE STILL COMING IN FOR ✽

# —==PURITAN.==—

Don't allow it to be said that you are an old fossil; be progressive, and plant the new Roses. Write for prices of Puritan.

**MRS. JOHN LAING.**—Fine plants of this grand Hybrid will be ready for delivery again this Fall.

**METEOR.**—This is a wonderful Dark Crimson Hybrid Tea.

No Florist can afford to be without the above Roses. Write for particulars to

**CHAS. F. EVANS,**

108 S. 12th Street,

PHILADELPHIA, PA.

**4,000 SMILAX.**

In 3-inch and 2½-inch pots, strong plants, \$1.00 per hundred; \$55.00 per thousand.

**ANDREW MEYER,**

3218 S. Jefferson St., ST. LOUIS, MO.

**CALLAS AND CENTURY PLANTS.**

Fine, strong Calla roots and Plain and Variegated Century Plants, all sizes, for sale cheap.

☞ Please write for prices.

**JOHN S. HAY, ONEIDA, N. Y.****CARNATIONS.****SURPLUS STOCK.**

Flue bushy plants from open ground.	Per 100
400 Crimson King.	\$5.00
1000 Hulse's White.	5.00
1000 Peter Henderson.	4.00
200 Fortia.	6.00
200 Garfield.	5.00
300 Grace Wilder.	6.00
300 Daisy, new, finest white out. Strong grower, splendid bloomer. Large plants \$2.00 per doz.	
1000 Cherry Currants, 1 year old.	\$1.50 per 100

**E. B. JENNINGS, FLORIST,**  
SOUTHPORT, CONN.**DOUBLE PRIMROSES.****Extra Large****CANE STAKES FOR ROSES.****ROSES.****BRIDE,****DUKE,****NIPHOTOS,****PERLE,****BENNETT,****LA FRANCE,**

And others. All grown from selected wood for bench planting.

☞ SEND FOR SUMMER TRADE LIST.

**GEO. W. MILLER,**

(Successor to Miller &amp; Hunt.)

**WRIGHT'S GROVE, CHICAGO.**

Mention American Florist.

**OUR NEW TRADE  
DIRECTORY**

Contains over

**6,000 Names of (Live)**

Florists, nurserymen and seedsmen, in the United States and Canada.

**PRICE ONLY ONE DOLLAR.****AMERICAN FLORIST CO., Chicago.****CARNATIONS.**

We offer to the trade very strong plants, including the following varieties:

**HINZE'S WHITE, SNOWDON, DeGRAW, PHILA., PORTIA, LA PERITE, C. KING, CHESTER PRIDE, &c.**  
PER 100, \$10.00.

Address,

**BRENNEMAN & PETERSON,**  
HARRISBURG, PA.

**My** **WHOLESALE AND DESCRIPTIVE Catalogues**  
for 1887, of Bedding Plants, Roses, Palms, Orchids, etc., mailed to all applicants. Large stock of the following on hand at cheap rates: *Ampelopsis Veitchii*, various sizes *Tea*, and *Hybrid Roses*, all the leading sorts, named *Chrysanthemums*, *Dracæa Indivisa*, various sizes, *Echeverias*, *Small Ferns*, *Geraniums*, double and single, best named sorts, *Areca Lutescens*, in 2½, 4, 5, and 6-inch pots, *Latania Borbonica*, *Scaevola Elegans*, *Oreodoxa Regia*, *Corypha Australis*. Other Palms, such as *Cocos Weddelliana*, *Chamærops Excelsa*, *Phoenix Reclinata*, *Phoenix Rupicola*, *Phoenix Tennis*, *Kentias* of sorts. *Glazinova Insignis*, fancy named *Clematis*, and other vines, etc. Prices given on application.

**WM. C. WILSON, FLORIST,**

Steinway's, Astoria, L. I.

**I**T is a conceded fact that there is no better place in the U. S. for Nurserymen to sort up, Dealers to Pack, or Planters to order, than at the Painesville Nurseries, the aim of



**THE STORRS HARRISON CO.** being to carry a full line of Fruit and Ornamental Trees, Bulbs, Shrubs and Roses. Have a remarkably fine stock of Standard and Dwarf Pears, Kilmarnock Willows and other Weeping Trees; also Grape Vines, including all the Best New Sorts—*Moore's Diamond*, *Empire State*, *Niagara*, *Jessica*, *Frances B. Hayes*, etc. Can supply car loads of elegant, large Nursery-grown Elms, Catalpas, Maples, Poplars, Tulips, etc. The



handsomest lot of Pyramidal Arborvitæ and Irish Juniper ever offered, and acres on acres of other Evergreens. Prices reduced to suit the times. Come and see. Correspondence solicited. Catalogue Free. 33d Year. 700 Acres. 24 Greenhouses. Address **THE STORRS & HARRISON CO., PAINESVILLE, LAKE CO. OHIO.**

**THOMAS S. WARE,**

HALE FARM NURSERIES,

**TOTTENHAM, LONDON, ENGLAND.****SPECIALTIES:**

Hardy and Forcing Bulbs, Narcissus, Lilies, Gladiolus, Chionodoxia, &c. Dahlias, the largest stock in Europe; Carnations, Forcing Pinks, Chrysanthemums, Pyrethrums, Pæonias, Gooseberries, Moss Roses, Hardy Herbaceous Plants, &c., &c.

Narcissus Obvelleris; the finest Trumpet forcing Narcissus, selected bulbs . . .	Per 1000 @ 100s
Narcissus pseudo scoticus (the garland daffodil), a fine, early forcing variety . . .	@ 40s
Chionodoxia Lucilica, fine roots . . .	@ 25s
Freesia refracta alba . . .	@ 90s
Freesia Leichtlinii Major . . .	@ 90s
Lilium Chalcedonicum, the true scarlet Martagon lily . . .	per 100, @ 80s
Lilium Martagon Album, the white Martagon lily . . .	per doz. @ 30s
Lilium Pompoulium, one of the earliest bright scarlet flowers . . .	per 100, @ 40s
Lilium Browni, one of the finest trumpets, 10-inches long, inside pure white, outside purple . . .	per doz. 24s, 30s and 36s
Lilium Giganteum, per doz. 24s to 60s; extra large roots . . .	each, 7s 6p and 10s 6p
New Cactus Dahlia "William Pearce," deep yellow flowers, very free . . .	per doz. @ 12s
New Cactus Dahlia "Mrs. Hawkins," light sulphur shading to white . . .	per doz. @ 12s
Cactus Dahlia "Cochineal," rich velvety colored flowers . . .	per doz. @ 9s

Cactus Dahlia "A. W. Tait," pure white flowers, very fine . . .	per doz. @ 12s
Pomponæ Dahlias in variety, my selection per hundred, 40s . . .	per doz. 6s
Show and Fancy Dahlias in variety, my selection . . .	per hundred, 40s; per doz. 6s
Single Dahlias in variety, my selection per hundred, 40s . . .	per doz. 6s
Perpetual Carnations in many fine varieties . . .	per hundred, 100s and 130s
Carnation "Gloire de Nancy," fine pure white, clove-scented flowers . . .	per hun. @ 40s
Old Crimson Clove . . .	per bun. @ 20s
Single Pyrethrums, in fine varieties, Per hundred . . .	@ 30s and 40s
Double Pyrethrums, in fine varieties, Per hundred . . .	@ 30s and 40s
Phloxes, in fine varieties . . .	per hundred @ 30s
Florists' Pinks, in fine varieties, per hun. . .	@ 30s
New Chrysanthemum "Mrs. H. J. Jones," yellow sport from Ethel, very late, per doz. 12s	
New Chrysanthemum "Golden Gem," Japanese form, deep chrome yellow flowers per doz. . .	@ 18s

Delphiniums, in first-class variety. Per hundred . . .	@ 60s and 80s
Delphinium Belladonna . . .	per hundred @ 40s
Double Herbaceous Pæonies, in fine varieties . . .	per hundred, 100 and 120s
Single Herbaceous Pæonias, in fine varieties . . .	per hundred @ 100 and 120s
Pæonia officinalis rubra plena, the old red peony . . .	per hundred @ 40s and 60s
Pæony tenifolia plena, pretty deeply divided foliage, double crimson scarlet flowers per dozen . . .	@ 12s, 18s and 24s
Pæony Whiteji, fine double white flowers per dozen . . .	@ 12s and 18s
Tree Pæonies, a splendid collection of all the best named sorts . . .	per doz. 30s and 36s
Extra fine . . .	@ 48s
Old Red Moss Rose, forcing stuff, per hundred, 25s . . .	per thousand, \$10 10s
Gooseberry "Industry," two years, per hundred, 15s, per thousand, 140s; Strong, three years . . .	per hundred, 25s
Gaillardias, several fine new vars. . .	per hun. 60s

☞ Full descriptive catalogue may be had upon application.





## ORCHIDS.

Their structure, history and culture (illustrated); by L. CASTLE.

This most instructive and practical work will be sent gratis, with our

### Amateur's Collection

of TWELVE ESTABLISHED ORCHIDS, blooming at different seasons, beautiful varieties, of easiest culture, for \$10.00.

Catalogue full of information on orchids free on receipt of 2c. stamp.

BRACKENRIDGE & CO.,

GOVANSTOWN, Baltimore Co., MD.

## ORCHIDS.

20,000.

In all the good flowering sorts, at moderate prices. Cut blooms at all seasons.

Send for catalogue,

W. M. MATHEWS,  
Utica, N. Y.

## \* FERNS. \*

Fine Stock of best varieties for cutting from for cut flower work. All the best new and old varieties of

### ADIANTUMS AND PTERIS.

\$8.00 A HUNDRED.

ALL IN FINE CONDITION.

GEO. WITTBOLD,

Wright's Grove, CHICAGO.

### FOR SALE.

25,000 Azalea Indica,  
15,000 Camellias.

Orders for fall delivery now booked. For descriptive catalogue address,

C. H. JOOSTEN,

Importer of Plants, Bulbs & Seeds,  
3 COENTIES SLIP, N. Y.

### 50,000 CUT FERNS.



From 10 to 15 inches long, of a beautiful dark green, used for Bouquet work, filling flower baskets, &c., &c. \$1.50 per 1000 Ferns.

### SPHAGNUM

or Packing Moss constantly on hand; long clean fiber. Dry or Green.

\$1.00 per bbl. or six bbls. for \$5.00. Bouquet Green, \$2.00 per bbl.

L. B. BRAGUE,

HINSDALE, MASS.

### 10,000 ELECTROS.



Send for List of Catalogues.

## ORCHIDS.

The largest stock in America of Orchids for Cut Flowers.

### Special Offers.

SIEBRECHT & WADLEY,

409 Fifth Avenue,

Rose Hill Nurseries, NEW YORK.

## PALMS.

LARGEST AND BEST STOCK

— OF —

PALMS for DECORATIVE PURPOSES

In the world, not excepting Europe:

PRICES LOW.

Siebrecht & Wadley,

409 FIFTH AVENUE,

NEW YORK.

PLANTS, SEEDS AND BULBS

## FINK & CO.

Postoffice Box 484,

City of Mexico.

### Hardy American Plants.

LILIES, FERNS, BULBS,  
ORCHIDS, SHRUBS.

Send for Trade List.

PRINGLE & HORSFORD,  
CHARLOTTE, VERMONT.

## \* PANSIES \*

AND OTHER SEEDS FOR FALL SOWING  
My collection of Pansies has for years attracted a great deal of attention; florists and amateurs both conceding them to be of the highest quality.

OSCAR R. KREINBERG,  
P. O. Box 294, PHILADELPHIA, PA.  
Write for Price List.

## PANSIES.

My Pansies are from the finest English, French and German growers' strains, and my seed is carefully selected from perfect and best colored flowers.

The plants have been transplanted and are strong and healthy.

I offer them in finest mixture, 60c. per 100, \$5 1000.

SEPARATE COLORS.

SNOW QUEEN, white with blue eyes; YELLOW CYPRIOT, YELLOW SUNLIGHT, DR. FAUST, black; LIGHT BLUE; DARK BLUE; EMPEROR WILLIAM; BISMARK and ODIERS, 70c. per 100; \$5.00 per 1000.

ODIERS in finest selection, \$1.00 per 100.  
Strong but not transplanted seedlings, 40c. per 100; \$3.50 per 1000.

C. ZEPNICK, FLORIST,

1329 Kin. Ave., MILWAUKEE, WIS.

### CARNATION PLANTS.

Strong and Healthy, Ready Sept. 15th.  
Edwardsii, Chester Pride, Fascination, Scarlet Gem, Philadelphia Red, Snowdon, Duke of Orange, &c.  
\$6.00 per hundred; \$50.00 per thousand.

Also, 500 Niagara Grape Vines, strong, one year old, ready in Nov. or next spring, \$15 per hundred.  
W. R. SHELMIER, Avondale, Chesler Co., Pa.

## PANSIES.

J. Goode Coleus.

Fine young plants of my pansies which are a carefully selected mixture from the best strains in the world. Size for planting your cold frames

90 cents per 100, \$7.00 per 1,000.

Fine pot plants of J. Goode Coleus at

75 cents, 50 cents and 35 cents per dozen.

Price per hundred on application.

ALBERT M. HERR,

LOCK BOX 338, LANCASTER, PA.

### SPHAGNUM MOSS,

Especially for Florist use, \$2 per bale. Peat \$1.25 per bbl. Sheet or Log moss, \$2 per bbl. Pitcher plants, a Wisconsin novelty, \$3 per doz.

Lycopodium in its season at lowest prices per bbl. or ton.

Z. K. JEWETT, Sparta, Wis.

### ZIRNGIEBEL'S

IMPROVED : GIANT : TRIMARDEAU.

Seed of that magnificent strain of PANSIES now ready.

1,000 seeds trade packages at \$1.00 each.

DENYS ZIRNGIEBEL,  
NEEDHAM, MASS.

### OUT WITH THE LATEST!

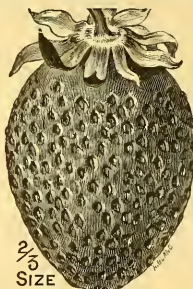
### CARNATION - CULTURE

No Carnation Grower should be without this book. The only standard work in Europe or America, and is recognized as authority on this important plant. Price, \$1.50. Table of Contents free.

LORA L. LAMBORN,

Box 592, Alliance, Ohio.

## THE BELMONT STRAWBERRY



2 1/2  
SIZE

THE BEST EVER PRODUCED.  
TWO FIRST PRIZES 1886.

FIVE FIRST PRIZES 1887

At the June Exhibition of the Mass. Horticultural Society, Boston.

BUY YOUR PLANTS OF THE INTRODUCERS.

Belmont Pot Plants.....	Per doz.	Per 100
Belmont Layer Plants.....	.....	.....

All Old Standard Varieties.

Potted plants.....	.....	.....
Layer plants.....	.....	.....
Jewell potted plants.....	.....	.....
Jewell layer plants.....	.....	.....

Send your address now for Illustrated Catalogue of  
**DUTCH BULBS,**  
For Winter Flowering. SENT FREE.

OLD RELIABLE SEED AND

Agricultural Warehouse  
**PARKER & WOOD.**

49 North Market St., BOSTON.

Mention American Florist.



## Cincinnati.

Frank Huntsman and his bride continued their tour to Boston.

White flowers are getting rather scarce. Tuberoses are by no means plentiful.

At a musical club dinner the center piece was a hanjo made up of a score of a varieties of flowers.

En route home from Chicago, Robert Craig and John May and their wives spent a day with the Cincinnati florists.

A chaste design for a funeral made by the Floral Exchange was a cross of oak leaves decorated with a simple spray of Niphetos buds.

Said Mr. McKinney of the Cincinnati Floral Co.: "The simplest sort of designs are being accepted for funeral work now. I made up a flat basket this week for a man who said he was tired of seeing so many crosses and anchors."

A custom that obtains to a considerable extent in society just now is the decorating of houses of returning tourists. Sunderbruch made a remarkably handsome piece for a family just home from Europe. It was an anchor of scarlet geraniums, upon which rested a great basket of roses—over a hundred blooms in all. The design was placed on an easel over which was the word "Welcome."

A few days ago Mr. B. P. Critchell discarded coal at his greenhouses at Carthage and began the use of crude petroleum. Speaking of the advantages of the new fuel to me, he declared: "In the first place, you need no fireman, and you do away with smoke, dust and ashes besides. When you first start it you raise considerable of a stink, but that soon burns out. I calculate that I will save at least thirty-five per cent. by using petroleum." Cincinnati is only 101 miles from the Ohio oil fields, and Mr. Critchell has the additional advantage of being located right along the railroad, and he can have the oil piped right into his premises without moving the tanks from the switch. The use of petroleum by florists as a means of heating their greenhouses is a problem that will doubtless agitate all in the business.

REN MULFORD, JR.

**PORTLAND CEMENT.**—In reply to query in last issue—Portland cement 1 bushel, good sand (free from soil) 3 bushels, mix thoroughly together, then wet well and use at once as it sets quick and soon hardens into substantial artificial stone.

B. H.

**M. M. BAYERSDORFER & CO.**

56 N. 4th Street, Philadelphia, Pa.,

Manufacturers and Importers of

**Baskets & Florists' Supplies**

NEW CATALOGUE READY,

and sent free on application.



ALL SIZES OF SINGLE AND DOUBLE THICK

**GLASS FOR GREENHOUSES.**

ALL GLAZIERS' SUPPLIES.

Write for Latest Prices.

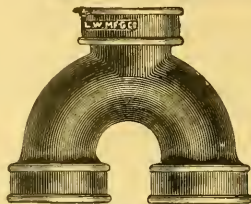


FOR THE TRADE.  
**FLORAL WIRE DESIGNS.**

JAS. GRIFFITH,

THE PIONEER MANUFACTURER IN THE WEST,  
305 Main Street, CINCINNATI, OHIO.

SEND FOR WHOLESALE PRICE LIST.

**Greenhouse Pipe and Fittings**

Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

**GET THE BEST!**

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

Mention American Florist.

**L. Wolff Mfg. Co.,** 93 to 111 W. Lake St. CHICAGO

**GURNEY NEW HOT WATER HEATER.**

THE CHEAPEST AND BEST FOR  
**GREENHOUSES AND CONSERVATORIES.**

THE GURNEY HEATERS present more water surface to the direct action of the fire than any others (known to us) in use. They are the easiest to keep clean, and with due attention almost any kind of fuel may be used.

**EASILY REGULATED.  
SIMPLE AND EFFICIENT.**

Safe and Economical.

J. A. FISH, Managing Director,

1237 FRANKLIN ST., BOSTON, MASS.

SEND FOR PAMPHLET AND PRICE LIST.

SELLING AGENCIES.—M. H. Johnson, 140 Center Street, New York. Rice & Whitacre Manufacturing Co., 42 and 44 W. Monroe Street, Chicago (West and Southwest). T. R. Chase, 31 Edmund Place, Detroit, Mich. (For Michigan and Ohio). Wm. Gardiner & Co., Portland, Oregon.

**SASH BARS MADE OF CLEAR CYPRESS LUMBER.**

Equal to Red Cedar in durability. Plain Bars  $1\frac{3}{8} \times 1\frac{3}{4}$  inches kept in stock. Price 2 cents per lineal foot. F. O. B.

Lockland Lumber Company, Lockland, Hamilton County Ohio.

**BLACK HAMBURG GRAPES.  
"GRAPE DUST" AND MILDEW.**

BENJAMIN HAMMOND, ESQ., Esteemed Friend: Enclosed please find check for Grape Dust, etc. I have delayed remitting for this bill until I could report on the efficiency of the preparation. Three vines in my graperies—Black Hamburgs—were seriously attacked with mildew, on both leaves and fruit. Three applications of the Grape Dust entirely removed it, and the crop has ripened perfectly. The formula for its preparation, which you kindly sent me, shows it to be non-poisonous and entirely safe for use upon fruit to be eaten.

Yours, very truly,

JAMES WOOD.

For Sample, send stamps to HAMMOND'S SLUG SHOT WORKS, Fishkill-on-Hudson, N. Y. SOLD BY THE SEEDSMEN OF AMERICA.

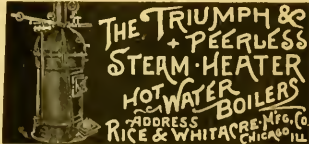
**Ives' Putty Machine.**

Patented Jan. 8, 1887.

The best device ever invented for laying putty. With this you can make old leaky sash perfectly tight without removing the glass. It will do the work of five men in bedding glass.

Sent by Express on receipt of price, \$3.00.

J. H. IVES, DANBURY, CONN.

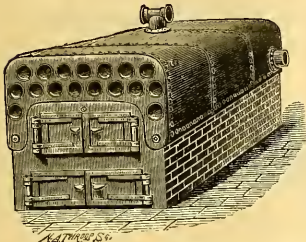


ESTABLISHED 1854.

**Devine's Boiler Works**

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers.



Capacity from 350 to 10,000 feet of four-inch pipe.  
Send for New List.

**PETER DEVINE,**

387 S. CANAL ST.,

CHICAGO.

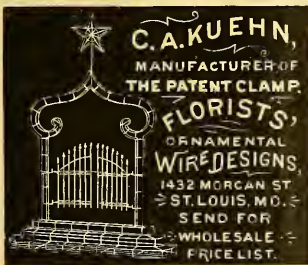
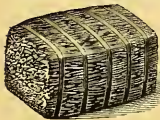
ESTABLISHED, 1866.

**Floral Wire Designs,**

Manufactured by

**N. STEFFENS,**

335 East 21st Street, - NEW YORK.

**TOBACCO STEMS FOR FLORISTS,**

FOR SALE, packed in  
bales 200 to 250 lbs.

NO CHARGE for deliver-  
ing to depots.

**PRICE:**

From \$5 to \$10 per ton,  
according to quanti-  
ties.

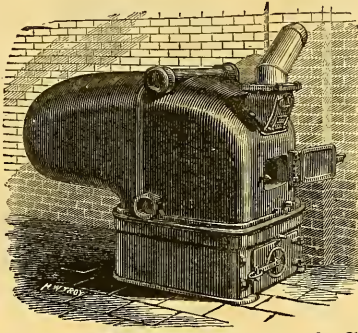
Address

**P. C. FULWEILER,**

716 Arch Street, PHILADELPHIA, PA.



Wm. Radam's Patent Process for  
Preserving Perishable Goods is the most  
perfect process on earth. It kills the  
fungus, or germs in the articles treated,  
and fermentation is stopped. Any  
quantity up to a car load can be treated  
at one time. Patented September 28,  
1886. Send for circulars to  
Wm. Radam,  
Austin, Tex.

**Greenhouse Heating AND Ventilating**

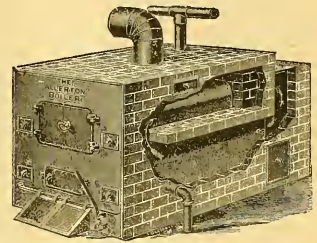
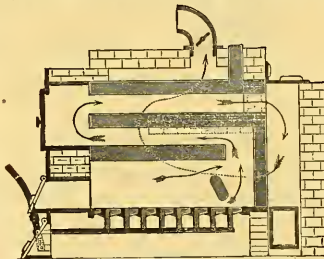
Send 4 cents postage for Illustrated Catalogue.

**HITCHINGS & CO.**

233 Mercer Street, New York.

Five Patterns of Boilers,  
Eighteen Sizes,  
Corrugated Rire Box Boilers  
Saddle Boilers,  
Conical Boilers,  
Base Burning Water Heaters

Perfect Sash Raising Apparatus.

**GREENHOUSE HEATING APPARATUS.**

THE "ALLERTON" BOILER.

**WROUGHT WELDED BOILERS**

— WILL NOT CRACK LIKE CAST IRON. —

— NO SEAMS OR RIVETS TO BECOME LEAKY. —

**SEVEN PATTERNS.****FORTY-SIX SIZES.**

Suitable for Hard or Soft Coal, Gas-Coke or Wood.

Greenhouse pipes and fittings with improved rubber ring  
joints as used in England, by which a perfect joint can be  
made in one minute and at half the cost of the old-fashioned  
calked joints.

— \* — **GOLD AND SILVER MEDALS.** — \*

Awarded to our Boilers at London, Paris, Brussels, Berlin,  
Manchester, Birmingham, &c., after actual working tests  
against all comers.

Write for Catalogues.

**ECLIPSE MANUFACTURING COMPANY,**

125 South Clinton Street, near Monroe.

**CHICAGO, ILL.****DICK'S HOT WATER GRATES**

Are more economical in fuel and will last THREE  
TIMES as long as the solid grates; they can be  
used in connection with Hot Air Flues. Send for  
circular of

**TUBULAR SADDLE BOILERS AND GRATES**TO **JOHN DICK, JR.,**

273 South 11th St., Philadelphia, Pa.





## Index to Advertisers.

Advertising Rates, etc.	67	McAllister, F. E.	71
Allen, W. S.	67	McFarland, J. Horace	74
Am. Florist Co.	69	Maize, R.	70
Bakker Bros.	71	Matthews, Wm	73
Bayersdorfer, M. M. &	71	Meyer, Andrew	73
Blanc, A.	70	Michel Plants Seed Co.	71
Brackenridge & Co.	70	Miller, Geo. W.	73
Brague, L. B.	70	Monon Route	78
Brenneman & Peterson	70	Murdock, A. M. & L. B.	67
Bucklin, Rolt. T. & Co.	69	Myers & Co.	28
De Veer, J. A.	71	Parker & Wood	73
DeVine, Peter	71	Penstock, Chas. E.	67
Dick, John Jr.	71	Perkins, John J.	67
Dillon, J. L.	71	Perkins, J. N.	69
Dunovan, R. H.	70	Plenty, Joseph	69
Dreer, H. A.	69, 70, 71	Price, Charles S.	74
Eclipse Mfg. Co.	69	Tringle & Horsford	71
Elliot, H. A.	69, 70, 71	Quaker City Machine Works	69
Evans, Chas. F.	72	Radford, Wm.	72
Exeter Mach. Wks.	78	Reed & Keller	71
Fahner, John R.	72	Rice & Whitacre Mfg. Co.	70
Fassett, F. E. & Bro.	71	Rolker, Aug. & Sons	71
Fisk & Co.	73	Rose Mfg. Co.	74
Fulweiler, P. C.	71	Ross & William	65
Garfield Park Rose Co.	65	Saul, John	78
Gasser, J. M.	78	Schultheis Bros.	65
Giddings, A.	70	Schultz, Jacob	78
Grashoff, Martin	72	Scollay, John A.	78
Griffith, Jas.	70	Seale & Co.	71
Gronow, Henry J.	69	Sheppard, E. & Sons	71
Gurney Heater Co.	70	Shelshire, W. F.	67
Hales, H. W.	70	Sheridan, W. F.	67
Hallcock & Thorpe	71	Siebrecht & Wadley	75
Hammond & Hunter	67	Situations, Waits etc.	65
Hammond's Star Shot	70	Smith, Wm. H.	71
Harold, Thos. G.	74	Spooner, Wm. H.	65
Harvey, J. J.	74	Steffens, N.	72
Hay, John N.	73	Stewart, Wm. J.	67
Hendersoo, F. & Co.	74	Storrs & Harrison Co.	73
Herr, Albert M.	75	Strauss, C. & Co.	67
Hickley, Henry G.	74	Thompson, Mrs. J. S. R.	71
Hill & Co.	62	Tritschler, M. & Sons	69
Hippard, E.	71	Ude, J. W.	78
Hitchiner & Co.	71	Van der Schiedt & Son	69
Hooker, H. M.	70	Vaughan, J. C.	67, 71
Fulsebosch Bros.	71	Ware, Thos.	69
Bres, J. H.	70	Weathered, Thos. W.	78
Jennings, E. B.	73	Welch Bros.	67
Jewett, Z. K.	70	Whitlin Potter Co.	69
Junkin, Conick, A. M. C.	70	Wilks, S. Mfg. Co.	78
Keefer, John	67	Wilson, Wm. C.	73
Kerr, James	71	Witold, Geo.	73
Lock, W. W.	74	Woff, L. Mfg. Co.	70
Menberg, Oscar R.	75	Wood, L. C. & Bro.	65
Reich, C. A.	67	Wood, Thos. W.	75
Reinhorn, John	75	Zepneck, Chas.	75
LaRoche & Stahl	67	Zirngel, D.	75
Lockland Lumber Co.	76		

WINNIPEG, MANITOBA.—The flower show of the Manitoba Floral association occurred Aug. 25. The exhibition was opened by the lieutenant governor, and was very successful, the exhibits being numerous and complete and the attendance large. First prizes were awarded to R. Alston, James Pont, John Davy, Dr. McArthur, John Cape, Wm. Risk, Walter Scott and Mrs. John Farley.

## ORCHIDS, RARE PLANTS, &C.

A very large stock of choice East India Orchids, viz.: Phalaenopsis, Bepanthera, Saccobulbium, Eridia, Cyrtopodium, Dendrobium, etc. Also Central and South American Orchids, as Cattleyas, Laelias, Lycastes, Oncidiums, Odontoglossums, well-grown plants, and at as low rates as it is possible to offer these fine sorts.

### NEW AND RARE PLANTS,

A large collection of Hothouse and Greenhouse plants, which are carefully grown, and offered at low rates.

### DUTCH BULBS,

Large importations direct from the leading growers in Holland; first quality bulbs. Catalogues on application.

JOHN SAUL, WASHINGTON, D. C.

—FOR—

## PAMPAS — PLUMES

ADDRESS THE GROWER,

J. W. UDE, Santa Barbara, Cal.,

—OR—

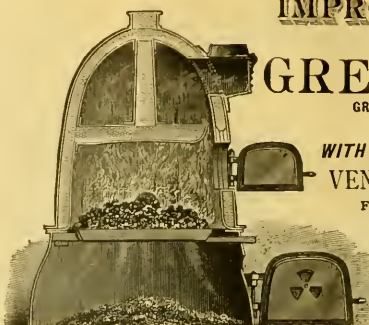
A. VIRGIEN, P. O. Box 319, New York City.

Delegates to the next convention will travel via the

**PULLMAN CAR LINE**

TO AND FROM Louisville, Indianapolis, Cincinnati and the winter resorts of Florida and the South. For full information address

E. O. McCormick, Gen. Passenger Agt., Chicago.



Sectional View.

## IMPROVED BOILERS

FOR HEATING

## GREENHOUSES

GRAPERIES, POULTRY-HOUSES, ETC.

ALSO FOR HEATING

WITH HOT WATER UNDER PRESSURE.

## VENTILATING APPARATUS

For Raising Sashes in Greenhouses.

## GALVANIZED SCREW EYES

And Wire for Trellis Work.

Send for Catalogue.

Thos. W. Weathered,

46 & 48 MARION ST., N. Y.

Mention American Florist.



## HEATING APPARATUS

FOR

## Greenhouses, Etc.



CAST IRON PIPE AND FITTINGS.

JOHN A. SCOLLAY,

74 & 76 Myrtle Ave.,

Brooklyn, N. Y.

## Improved Hot Water Boilers

For Heating

## Greenhouses, Graperies,

CONSERVATORIES, ETC.

ALSO

Cast Iron Pipe, Fittings, Valves and

all Material for Heating by

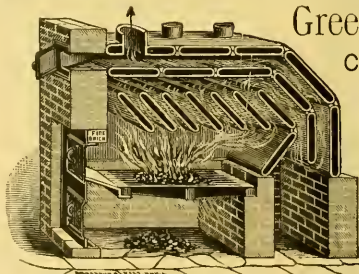
Hot Water.

Send for Catalogue.

MYERS & CO.

1173 So. 9th St.,

PHILADELPHIA.



## GREENHOUSE HEATING

BY STEAM, BY HOT WATER, BY COMBINATION STEAM AND WATER.

EXETER MACHINE WORKS,

19 FEDERAL ST., BOSTON, MASS.

WORKS EXETER, N. H.

## THE CELEBRATED WILKS WATER HEATER!

For Heating

GREENHOUSES,

DWELLINGS,

POULTRY HOUSES,

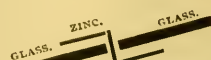
STORES, BATH TUBS,

ETC., ETC.

Send for Price List.

S. Wilks Mfg. Co.,

Cor. Monroe & Clinton Sts., Chicago



J. M. GASSER'S

## PAT. ZINC JOINTS

For Butting Glass without Laps.

Makes it air and water tight. No breakage from frost. Saves fuel and glass. FLORISTS, WATCHMAN, for Flues and Hot Water, \$10.00; for Steam, \$5.00. It will ring a bell when the temperature changes, and ring when the steam goes down.

J. M. GASSER.

71 Euclid Avenue, CLEVELAND, OHIO.

Mention American Florist.

# THE AMERICAN FLORIST



*America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."*

Vol. III.

CHICAGO AND NEW YORK, OCTOBER 1, 1887.

No. 52.

## THE AMERICAN FLORIST

Copyright, 1887, by American Florist Company.  
Entered as Second-class Mail matter.

Published on the 1st and 15th of each month by  
THE AMERICAN FLORIST COMPANY.

GENERAL OFFICES, 54 La Salle Street, Chicago.  
EASTERN OFFICE,  
Room 81, Vanderbilt Building, New York.

All communications should be addressed to the  
general office at Chicago.

SOCIETY OF AMERICAN FLORISTS.—E. G. Hill, Richmond, Ind., president; John N. May, Summit, N. J., vice-president; M. A. Hunt, Terre Haute, Ind., treasurer; Wm. J. Stewart, 67 Bromfield street, Boston, Mass., secretary. The fourth annual meeting at New York, Aug. 17, 18, 19, 1888.

THE DATE at which your subscription expires is noted on the address label. See that it does not pass without a renewal of your subscription. When you have renewed you will note that the date on your address label has been changed. Subscribers can ascertain at any time when their subscription expires by examining the address label which is on every number they receive.

THE REPORT of the proceedings of the S. A. F. at Chicago will be sent only to those whose dues for 1887 have been paid. All members who have not already paid are requested to forward their dues at once to the secretary or treasurer of the society, so they may receive promptly the report for this year. Any member whose name has been incorrectly printed in former reports, or in the list published in the FLORIST's convention supplement, are invited to send their correct name and address at once to Secretary W. J. Stewart, Boston, Mass., who will see that it appears correctly in the forthcoming report.

ALMOST FROST.—Black frost occurred at Chicago on the last night of September in 1886, and on the night of Sept. 23 of this year it was so near a frost as to thoroughly alarm florists. At Lincoln park the warning of the 23d has been heeded; cuttings are being taken from outdoor stock, and preparations are being made to at once house all tender plants. By the time this issue appears the bulk of the plants which are to be housed will be under cover. Florists in this latitude should not delay a day in getting their stock in.

Since writing the above we note reports in the daily press of actual frosts having occurred at a number of places in widely separated localities. Frost in Virginia has seriously damaged the tobacco crop; there was a heavy frost at St. Joseph, Mich., while snow fell at Farmington, Me., and at Atlantic City, N. J. There was also frost in the west, though none of a serious nature has yet been noted in localities close to the lakes,

Massachusetts Horticultural Society.

FIFTY-NINTH ANNUAL EXHIBITION.

The annual exhibition of this society is always well worthy of notice, but this year it was of especial interest for several reasons. The society was honored by having as its guests the American Pomological society, which held its sessions in Boston this year. The combined exhibitions of the two societies were of such a magnitude that Horticultural Hall was considered too small, and therefore the show was held in the large hall of the Mechanics' Building, while the hall in Horticultural Building was given up to that diverting Boston institution known as a baby show. And a singular feature of this baby show is that it attracts crowds of people as no horticultural exhibition, however good, ever attracted. The writer will not attempt to explain the reasons for this popular preference for young humanity in its various colors and weights, over the horticultural pets from all corners of the earth, but it is a fact, and a solemn one for the horticultural exhibitors from a pecuniary point of view.

The grand Mechanics' Hall is very suitable for the display of fine plants, the only fault being that perhaps it is a little too lofty; but it was a pleasure to see the beautiful show plants set out with plenty of space about them, so that their perfection of form and color could be seen to full advantage. The hall was so much larger than the one in which we have been accustomed to see these plants that on first entering the impression was one of disappointment, but after looking through a few of the groups and getting used to the vastness of the place, the effect became more and more pleasing, and one became gradually convinced that the exhibitors had done nobly, and that the exhibition as a whole was an unusual one, in size, variety and intrinsic value. The center of the hall was devoted to show plants, which were arranged by their owners in artistic groupings, while the sides were used for the tables bearing the luscious contributions of the Pomological Society. There were enormous apples from Arkansas, grapes in endless variety from New York state and elsewhere, pears from all over New England, vegetables from the renowned Boston market gardens, with plums, peaches, crabapples and Indian corn ad infinitum from everywhere. The principal exhibitors of hot-house grapes were David Allan and Jas. Bryden, both of whom showed some fine specimens and took a number of prizes, regular and special. Mr. Allan got first prize for a bunch of Black Hamburgs weighing 8 pounds 5 ounces.

At the farther end of the hall, in front of the stage, were two enormous tanks, in which were displayed the exhibit of

aquatics from Jas. Bryden. No such show of nymphæas has ever been seen here. The flowers were enormous, several varieties measuring a foot across. There must have been not less than 200 of these magnificent blooms open at once, and the effect was grand. Among the varieties of nymphæas shown were Zanzibarensis, Z. azurea, Z. azurea rosea, coerules, Devoniensis, lotus, dentata, Sturtevantii and gigantea, the latter being one of the prettiest, the color shading from pale in the center to bright purple at the tips. Mr. Bryden recommends Zanzibarensis azurea as the best one for general cultivation.

In the center of the hall was the famous Vanda Sanderiana, now the property of Messrs. Siebrecht and Wadley. The plant looks very finely and has at present eight spikes of bloom on it. It was sent to the exhibition under the special care of Mr. John Thorpe. Fringing the entire end of the hall in front of the stage was the display of cut flowers. Most noticeable among these were the dahlias, which in their endless variety of color, in the showy double flowers, the symmetrical globes of the pompons, and the saucy discs of the single varieties, formed the best show of dahlias ever seen here. Among the exhibitors of these were E. Sheppard & Sons, Ed. Fewkes & Son, W. A. Manda, Mrs. C. E. Brooks, C. W. Hoyt, M. B. Faxon, Geo. S. Tuttle and John Richardson, who staged some good seedlings. The front and back of the stage were effectively grouped with evergreen shrubs in great variety, contributed by W. C. Strong, F. L. Temple and J. W. Manning. Many of these plants were beautiful specimens, and they added greatly to the appearance of the hall. Mr. Temple also showed, among other novelties, a new weeping lilac which is exceedingly pretty and will doubtless become very popular.

On a table on the stage were shown the orchids. The number and variety of these, both plants and cut flowers, were smaller than usual, owing to the absence of contributions from two of the most prominent orchid growers. It was noticeable that the commercial men came pretty well to the front this time, Messrs. Siebrecht & Wadley and Benj. Grey winning some of the best prizes. In Mr. Grey's collection were to be seen a fine plant of Cattleya gigas Sanderiana, Lycaste Skinneri, L. Deppei, Cypripedium Sedeni, C. Harrisianum, C. Ashburtoniae and Peristeria elata. In Siebrecht & Wadley's exhibit were several oddcids, including Jousenianum, incurvum and papilio; Dendrobium Dearei, D. formosum, Laelia Dayana, Cattleya labiata, C. gigas Sanderiana, Phaius maculata, and several cypripediums and lycastes. Mr. Manda of the Harvard Botanic Garden had some good cypripediums, among which were C. nanthum, Harrisianum, longifolium



and Stonei, also *Dendrobium Dearei*, *Odontoglossum biconense*, *Laelia elegans*, and *Oncidium Jonesianum*. John L. Gardner also showed some good orchids.

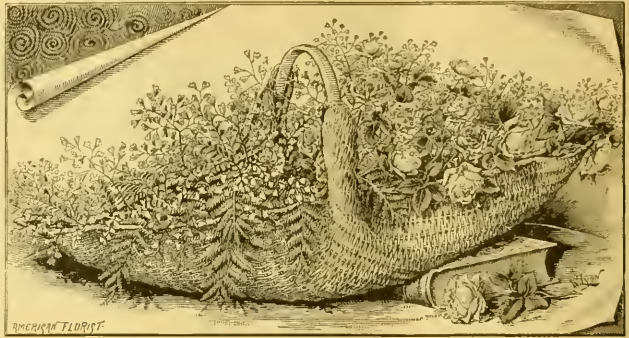
As usual the display of roses was very meager. Messrs. Norton showed some of the new roses, including *Gontier* and *Puritan*; T. W. Dee also exhibited a small collection, and there were a few from James Comley. If the society would offer sufficient inducement in prizes for roses, they would have no trouble in getting a good show of them.

An interesting section of the exhibition was that devoted to the display of fruiting shrubs from the Arnold Arboretum. Mr. Dawson had over sixty varieties in the collection, many of them, especially the diminutive Chinese and Japanese apples, being exceedingly showy. There were apples of all sizes, from tiny ones no larger than a holly berry up. The evergreen thorn (*Crataegus pyracantha*) is one of the most beautiful and showy of hardy shrubs. The same is true of several varieties of barberry. The American yew, a native of the northern states, and of course perfectly hardy, also deserves a place in every collection. For the benefit of those who are interested in this subject a complete list of the fruiting shrubs in Mr. Dawson's exhibit will be found in the next issue of this paper.

Now, to return to the tropical plants, which were in reality the main feature of the exhibition, we find the principal exhibitors to be F. L. Harris, gardener to Mr. Hunnewell; Wm. J. Martin, gardener to Mr. Kidder; C. M. Atkinson, gardener to C. S. Sargent; W. A. Manda of the Botanic Garden; Jas. Comley, gardener to Mrs. F. B. Hayes; Geo. A. Nickerson, and Thos. Clarke.

In Mr. Harris' collection were two new decorative plants which have never been shown here before—*Phrynium variegata* and *Heliconia aureo-striata*. Mr. Harris' new seedling dracaenas were well represented, some magnificent specimens being shown of Mrs. Sargent, Mrs. Shaw Waban, a grand colored variety, and Bella, with massive broad foliage. A *Dieffenbachia magnifica*, measuring seven feet through; *Musa superba*, with a span of about ten feet; a perfect plant of *Cycas circinalis*, which took the first prize for single specimen; *Ficus Parcelli*, *Phyllotenuum Lindeni*, *Croton Williamsii*, finely colored; *Dieffenbachia Jenmanii*, a new dwarf variety, and a magnificent piece of *Davallia Fijiensis* were among the most noticeable in this collection.

One of the best plants in the hall was *Eurya latifolia variegata*. This was about ten feet high and five feet through, furnished fully to the ground. It was one of Mr. Atkinson's collection. Another plant in this lot was *Nephrolepis rufescens triplinatifida*, one of the loveliest ferns ever introduced. This plant received a first-class certificate of merit. *Lomaria gibba platyptera* was another rare fern that attracted much attention. In this group were also specimens of *Tillandsia Lindeniana* and *Maranta exoniensis*. Mr. Comley showed what is considered the best plant here of *Cocos Weddelliana*, also a specimen of *Dasyllirion acrotichum* which was a perfect beauty. Mr. Martin's display of stove plants was a surprise. The plants were arranged with artistic effect, and as individual specimens they were all that could be desired. Some of the best were *Asparagus plumosus nana*, *Campylobotris robustum*, *Aralia Chabrierii*, *Alocasia Sedeni* and *Alocasia Thibautiana*.



FRENCH FERN BASKET (SEE PAGE 90.)

There was a collection of succulents in all their old and fantastic shapes from Hovey & Co., and a similar lot from Mr. Manda. Mr. Manda's exhibit of specimen plants was the largest in the hall, and was especially noticeable for the splendid ferns and selaginellas, which formed a large part of it. A pan of *Nephrolepis davallioides*, eight feet across, also *Nephrolepis davallioides furcans*, *Selaginella caulescens*, *S. caesia arborea* and *Adiantum trapeziforme*, *St. Catharina*, were among the best. Mr. Manda also showed the finest plant ever seen here of *Dichorisandra vittata*.

Thos. Clarke's exhibit was rich in variegated leaved plants, notably crotons, on which he took first prize. These were richly colored, and the plants averaged six feet in height. One of the most graceful and effective plants in the hall was *Kentia Balmoreana*, from Geo. Nickerson. Mr. Nickerson's display of decorative plants was superb, and included such gems as *Alocasia macrorhiza*, *Anthurium crystallinum*, *Dieffenbachia imperator*, *Phoenix rupicola*, *Phyllotenuum Lindeni* and crotons. *Caladiums*, which were formerly to be seen in these exhibitions in great profusion and variety, were noticeable principally for their absence. Are they going out of fashion?

Many gentlemen of prominence in the horticultural world were visitors at the exhibition, among whom were Louis Menand and L. Menand, Jr., of Albany; John Thorpe, New York; Geo. Savage, Rochester; Elias A. Long, Buffalo; W. S. Hogg and Geo. Johnson, Providence, and others.

WM. J. STEWART.

#### Notes and Comments.

There is another new rose to chronicle; this time Mr. Welsh of Ramseys is the fortunate owner. It is a white sport from *Souvenir d'un Ami*, possessing all the characteristics of the parent except the color. The tint is an ivory white, and the fragrance is exquisite. Perfume is always half the battle; no matter how beautiful a rose may be in other respects, it can never reach highest rank in public estimation without this desirable quality. This would always be the drawback to *Her Majesty*, even if we could make it a success in other respects. But we generally can't; apparently we have not struck the right chord in culture. Mr. Henry Bennett expressed great surprise that this rose has not done better with us; he

has a very high opinion of it. But probably he only grows it out of doors, and the difference between the English and American climate is too great to admit of any comparison.

By the way, what are we going to call "American Beauty"—its original name, or its alias? Madame Ferdinand Jamin is rather an awkward mouthful for a holiday flower; it would most likely be abbreviated in a very undignified manner.

The sale of Mr. Osborn's collection attracted a good deal of interest among both professionals and amateurs, and some of the specimens brought fairly good prices. The chief object of interest was, of course, the great *Vanda Sandersoniana*, formerly in the possession of the late Mrs. Morgan. Mr. Osborn purchased it at the sale of her collection for \$900; at the Osborn sale it was purchased by Siebrecht & Wadley for \$170. Mr. Siebrecht was offered \$550 for the plant immediately after purchasing it, but he refused the offer. Mr. Kimball of Rochester purchased a fine specimen of *Anthurium Andreanum* for \$75. Some of the dracaenas sold for fairly good prices, and also the pitcher plants.

In addition to this wonderful *Vanda*, Siebrecht & Wadley are fortunate possessors of another orchid rarity, a white variety of *Cattleya gigas*. It is, as far as we know, the only specimen in existence. The fact that it is a large and well-grown plant gives stronger probability to this view. It is certainly an unique specimen of a very beautiful thing, and is valued at rather over \$1,000. Nor is this a fancy price, viewed merely from a scientific standpoint. The possession of this plant is likely to be regarded with a certain amount of envy by some of our noted collectors.

We often hear growers around New York complaining that there is no money in ferns, though the use of some sorts, especially *adiantum*s, must be rather on the increase. Apparently this class of plants is grown much more extensively—and perhaps better too—around Boston and Philadelphia. We must give credit to Chicago too in this matter; Mr. Wittbold at Lake View grows an exceedingly fine lot of ferns for cutting, as well as for pot use. There is a new "general utility" *adiantum*, I am told, a *fragrantissimum*, in the possession of a Boston grower which would appear to be very valuable to the trade. It is fragrant, as its name implies, similar in appearance to *A. amabilis*, but



CARPET BED AT LINCOLN PARK, CHICAGO.

with more erect growth, like *A. cuneatum*. The fronds are hard and suitable for cutting, and its general appearance would make it satisfactory for decorative work. A number of varieties of pteris are very useful for trade purposes, and many of the hardier ferns, both British and American, make charming pot plants for the house, and as such would take their place in the retail trade. A few hardy ferns in fancy pots are usually the decorative stand-by of the frugal English woman who wishes to give her dinner table a more ornamental air at small cost.

The *Peristeria*—Dove orchid—is becoming rather less a novelty, now that a knowledge of its culture is more general. It was rather a surprise to see it advertised as a window plant, but a lady tells me she has been very successful with it grown in that way. Truly, orchids are not the rarity they once were, when the very name was enough to stamp them as uncommon.

But there is one very handsome thing that is not grown nearly as much as it deserves, and that is *Disa grandiflora*. It is a magnificent sight to see a large and well-grown specimen covered with its gorgeous spikes of bloom. It has had the reputation of being difficult to flower, but its shyness has doubtless been caused by want of sufficient moisture. Its native habitat, damp hill sides at the Cape of Good Hope, gives a suggestion of the proper treatment. Some

of the finest flowers I have seen were on plants put outside during the summer, planted out in a damp, shady spot by a small pond, the soil being, of course, a fibrous peat with a little live sphagnum. Some moisture-loving native orchids were planted here with the *disas*, and the effect was extremely handsome. *Disas* have the advantage of flowering at a season when orchid blooms are comparatively scarce, a fact which gives them additional value.

One of the handsomest members of the coleus family is the new English variety, "Jubilee." It has very large leaves and sturdy growth. The leaves are handsomely variegated, a bronzy hue lightened by magenta; the same type of coloring as the Bunyard strain, but it appears to have a more robust habit and constitution.

EMILY LOUISE TAPLIN.

#### President Hill May Now be Seated.

September 11 was the fortieth birthday of President E. G. Hill, and his employees, taking into consideration the unsubstantial nature of the chair of immortelles presented to him at the convention, made him a present on that day of a good substantial velvet plush upholstered easy chair. The presentation speech was neatly made by Mr. Ed. Bissell, after which the recipient, who had been taken entirely by surprise, managed to thank the boys for their kindness.

#### Chicago Parks.

Our illustration shows a large carpet bed which this summer occupies the center of the sunken parterre at Lincoln Park. The bed is 77 feet long from point to point and 64 feet wide. It presents a handsome contrast of color and is much admired by visitors to the park. We give a diagram below showing plants used.



#### KEY TO DIAGRAM.

1. Vase. 2. *Gerauium Wonderful*. 3. *Achyranthes Lindenii*. 4. *Coleus Tessellata*. 5. *Geranium Mt. of Snow*. 6. *Yuccas*. 7. *Coleus Wonderful*. 8. *Verbena venosa*. 9. *Coleus Pine Apple Beauty*. 10. *Gnaphalium lanatum*.

POTTSVILLE, PA.—Strauch Bros. have added 2,000 feet of glass to their place this year.





## Reminders.

This is the season when the rose is very likely to suffer from condensed moisture in the atmosphere; watch therefore very carefully the watering and air, and till firing commences regularly be very careful to use as little water as possible, except during the forenoon, and only on bright days, giving plenty of air at the same time to get the house as dry as possible before night. Perhaps the safest guide is the small drops of water around the edges of the leaves; when these are very conspicuous for more than one night—or rather morning—in succession, is the most dangerous time. This is almost certain to occur when it is clear weather and the temperature outside falls below 45° in the early morning, and as a safeguard it is advisable to have just enough fire heat at that time to raise the temperature of the greenhouse above 56°, but not over 60°. This slight precaution will often save a valuable house of roses. Every fall and spring we hear of people who suffer from this cause, and by observing the above simple rules it can always be avoided.

The rose at this intermediate season will not safely stand a lower temperature than 56°; 58° to 60° is better; whereas when the house is regularly heated by fire heat in winter, the plants are really benefited by a temperature of 54° to 56°, and by a little care in management it will well repay with interest. The above treatment will also be a great help in keeping down mildew, which is apt to be very troublesome at this season. Where mildew is badly affecting the roses now, choose the first cool night; light good fires early in the afternoon, get the pipes good and hot with plenty of air on till just before commencing to use sulphur; then shut down tight and apply a good coating of sulphur to the pipes, and keep the pipes hot for several hours; this will generally check the mildew till the next cool spell, when another good fire can be started to heat the sulphur up again. This mode of treatment is preferable to dusting the sulphur on the plants.

Where early forcing of hybrid remontants is desired, they should now be at rest, and should be pruned as required. A sunken pit with sash over is a good place to start them; after pruning they generally will swell their eyes and break stronger than in a greenhouse; where such is not to be had, place them in an intermediate house which can be closed at night, but do not let the temperature exceed 45° for the first three weeks, or till the eyes are well broken; then gradually increase the temperature as the buds show till it reaches 56° at night, but do not exceed that if fine roses are the desideratum. Many of our larger growers are now growing this class of roses entirely on benches, and dry them off by withholding water in the same way as for pots; but for the general grower this plan is hardly desirable as it requires a whole house to be treated all at once, and unless there is a good market convenient, many blooms would have to go to waste.

J. N. M.

## Roses on Their Own Roots.

It is very gratifying to find that so many of the leading rose growers of this country speak so emphatically of the value of roses upon their own roots above those that are worked. For some time the writer has been convinced by personal experiment that there is nothing to be gained by the grower of roses for cut flowers in growing budded or grafted roses. But he was content to wait until others of more extensive experience expressed their opinion. At the present time under his care can be seen a 100-foot bench of La France roses, all in a vigorous growing condition. Half of these have been worked upon the Manetti stock; the other half are on their own roots. For nearly two years they have occupied this bench, and are now as luxuriant and as promising as ever. During this time close observation was given as to whether the worked roses really



POUCH BASKET (SEE PAGE 90)

grew more vigorously or flowered more abundantly, with the conclusive result that the difference is so slight as not to be worth mentioning; what difference there is in favor of those grown from cuttings. The same experiment has been tried with the Beauty and Perle, but with a similar result.

This question may easily be solved for the satisfaction of each grower simply by trying the same experiment. But what more evidence do we need that there is no benefit to be derived by planting "worked" roses? Look at the authorities we have in favor of growing roses from cuttings! May, Asmus, Siebrecht, Hill, Taplin and Craig—all men of extensive experience and prominent as leading rose growers. Even Mr. Anderson himself did not assert that roses worked on other stocks were a decided advantage. I write from memory, but I believe he merely stated that in some cases they would do better than roses on their own roots. At Chicago not one grower of roses for cut flowers advocated the planting of worked roses. Such testimony should be conclusive for all of us.

ALFRED E. WHITTLE.

## American Beauty or Mad. F. Jamain?

A correspondent of the *FLORIST* who has recently visited a number of rosarians in Germany has been positively assured by several, prominent among whom being Harms of Hamburg, Mietzsch of Dresden and Schultheis Bros. of Steinfurth, that they have grown together and carefully compared plants of American Beau-

ty and Mad. F. Jamain and that beyond doubt they are one and the same. They stated that there was no difference whatever in either growth, habit or bloom.

On this side of the water President E. G. Hill is on record as believing the two to be the same. Are we to lose our cherished American Beauty? In Europe Mad. F. Jamain has not proved to be a first-class rose, here American Beauty is one of our most admired and useful roses. If the difference in climate can make such a difference in a rose as there certainly is in this (provided the two are the same) suggests the thought that there may be others among the roses which have failed to give satisfaction in Europe which may still suit perfectly the requirements of growers in this climate.

## Lilium Candidum.

A good many growers do not think it worth the trouble to save the bulbs of *L. candidum* after they have been forced once. I heard that idea expressed at the meeting in Chicago by some of our leading bulb forcers. I do not wish to contradict any one whom I know has experience, but I will only say that I am convinced that if any *Lilium* is taken proper care of, it will improve instead of deteriorate by being grown in pots, and even forced to some extent. We all know that *Liliums* do not stand any such forcing as hyacinths or tulips, or the like; also that all *Liliums* lose more or less vitality by being kept out of the ground for any length of time. They, like all bulbous plants, certainly require a season of rest, but they will not stand too severe a drying off during that period. *Lilium candidum*, and for that matter all the different species of *Lilies* that have come under my observation, do grow to some extent even during their resting period; even while the old roots are dying away new roots are formed and the bulbs increase in size, and if properly treated they will be better cured or ripened up than the bulbs generally are that we import.

I would like to ask some of our importers of bulbs if we did not get better bulbs a few years ago. I do not mean to say they were larger—they certainly are large enough now—but I think the bulbs were then more solid or better ripened, and consequently bloomed earlier. I have found that with a very little trouble in watering *candidum* after blooming, allowing them to dry down slowly, and keeping them comparatively dry till July or first of August, according to the time they bloomed, and then replanting them, starting slowly into growth again, I can have flowers at least a month earlier than with the best imported bulbs I have been able to secure; I also get a much better flower and more of them. I have at present about 200 bulbs of *candidum* that I would not exchange for any thousand bulbs of the best to be had which have been imported this season; some of mine I have grown in pots the last three years. Years ago I noticed the same result with *auratum*, *lancifolium* and *longiflorum*. I remember among a lot of *auratums* grown in pots and for years reported every season, it was not rare to secure from sixteen to thirty splendid blossoms from a single bulb; and I have even had as high as forty, but in the latter case some of them were not of full size. AUG. S. SWANSON.

St. Paul.

[We believe it true that the imported bulbs of *candidum* have been generally of inferior quality for two seasons past. Mr. S. should tell us about his soil.—Ed.]



FLORAL BUTTERFLY

#### Floral Butterfly.

Our illustration represents a novel floral design arranged by Mr. J. D. Carmody, a florist of Evansville, Ind., for a church decoration at Easter. The design was used as emblematical of the Resurrection, representing the butterfly arising from its chrysalis. The body was composed of lines of pansies of varied colors, while two blood-red tulips did duty for eyes. The other flowers used may be recognized in the engraving. The piece measured five feet from tip to tip of wings.

#### Dinner Table Decoration.

A correspondent thus describes the floral arrangement of a dinner table:

"The table was laid for thirty, and light was supplied by five candelabra arranged down the center. The central one was raised on a block one foot high, the next pair nine inches, and those at each end on blocks six inches high. Sheets of brown paper were placed right down the center of the table. Mounds of fresh green moss were then formed around each of the blocks with a gradual slope to the top. The diameter of the central mound at the base was about twenty inches, the next pair seventeen, and the outside ones fifteen; the space between the mounds was then covered with moss, but instead of joining the

outer edge of it in straight lines from one mound to the other, it was hollowed out so as to form the arc of a large circle sweeping towards the centre of the table from either side, which gave the design an informal appearance. It is now easy to imagine the centre of this as being covered with moss, with mounds rising around the candlesticks, and the outline hollowed out between the mounds. When this is done the most troublesome part of the work is over. The outer edge of the moss was then edged with brightly colored pieces of *Alternanthera amœna*, which formed a beautiful contrast to the white tablecloth on one side and fresh green moss on the other. Two light, graceful palms were next placed between the central candelabrum and those on each side of it, and small mounds made at their base to cover the pots. In the center of the space between the other candlesticks two more mounds were formed around plants of *Pandanus Veitchii*, and at each end of the table a noble-looking pine was placed; the whole surface of moss was then dotted irregularly with flowers of bright and distinct colors, such as poinsettias, camellias, white chrysanthemums, eucharis, epiphyllums, primulas, carnations, pelargoniums and azaleas, with small sprays of salvias and flowers of cyclamen peeping up here and there among fronds of maidenhair fern, with fronds of *Pteris serrulata* standing up well above the flowers. Fronds of

*Polystichum angulare proliferum*, with *Nephrolepis tuberosa* and *cyperus* springing up around the base of the candlesticks, completed the arrangement, the whole having the appearance of verdant undulating banks, with flowers and plants springing up from them in charming simplicity and profusion."

**WATER.**—The great importance of having an abundant supply of water has been well demonstrated in the vicinity of Chicago the past summer. The carnation plants of growers who were short of water are considerably below the average in quality, owing to the drought, while those of one grower who was able to water heavily all summer are quite up to the mark, in spite of the unfavorable season. The first outlay to secure this water supply was considerable, but the investment is paying well.

**CARNATIONS FOR SUMMER BLOOMING.**—Plants for this purpose should be propagated now from plants which have been bedded out during the summer. The wood should now be ripe enough to strike readily.

**A NEW CANNA.**—Mr. D. S. Heffron, Washington Heights, Ill., has a fine new canna which in habit and size of bloom resembles *C. Ehemanni*. The color of the flower is a peculiar but handsome shade of orange.



## Odds and Ends.

During my wanderings this summer, I saw in a cottage yard, a flower bed bordered with *Cissus discolor*; a couple of wires were stretched around the bed—the upper one about four inches above the ground—and the *cissus* trained along the wire formed a most beautiful border; the same plant, I was told, had been used in this manner for several seasons, being kept at a neighboring florist's during winter. It was a new and novel idea to me and one I purpose putting into practical operation if I live long enough.

Another plant I saw thriving out doors was *Sanchezia nobilis variegata*; it was growing most luxuriantly in a large urn; in the centre there was a magnificent specimen of *Dracena Negra rubra*, the rest of the urn being planted entirely with *sanchezia*. The vase occupied a somewhat shaded position, and I certainly never saw *sanchezia* better colored.

A florist was talking with me the other day on the matter of growing specimen ferns, and stated that in his practice he had found *Adiantum Farleyense* very difficult to grow. My own experience is exactly the other way. I find that *A. Farleyense* requires a rather stiff soil; well decomposed sod with a sprinkling of gritty sand will grow it to perfection. Keep up a warm, moist temperature, avoid much wetting over the fronds, and as the plants become pot-bound give liberal applications of liquid cow manure.

*Zinnia zebrina* has proved a most dismal failure with me, I could not for the life of me, detect the "zebrina" and so threw my collection away in disgust—but a bed of *Zinnia plenissima* fl. pl. has been for two months a blaze of magnificent bloom, the flowers in every respect being all that the most fastidious taste could desire.

An acquaintance of mine, who is adding to the number of his greenhouses, writes to ask me if "he can grow rosebuds, palms, ferns and other decorative plants, for his trade in houses heated by brick flues." He most undoubtedly can, but he as certainly cannot grow them well. Skill and attention will enable him to keep his plants in tolerable condition, but they will not compare favorably with plants grown in a house heated by steam or hot water, and the same may be said as to his roses. Buds grown in a house heated as my correspondent suggests, may pass muster if his trade is not very particular; but the people now-a-days, who use cut flowers, and decorate their homes, are extremely critical in their tastes, and the florist who desires to succeed must be abreast of the times, and his stock must be equal in quality to that of other growers if he would hold his own. Perhaps Mr. May could find time to give his views on rosebuds in flue heated houses.

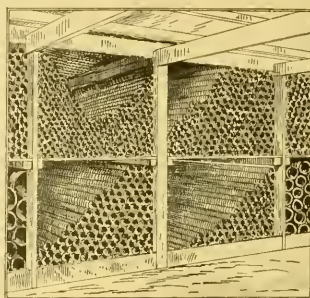
Some florists in my circuit appear to think that coleus as a bedding plant have had their day; I have heard this asserted frequently of late, but I have not heard a single suggestion as to what we shall substitute. There is no reason why coleus beds should become monotonous, it is unnecessary to use the same beds season after season, and numerous varieties now in cultivation gives us ample material for an endless variety of pleasing designs. I don't just see how we could possibly dispense with coleus altogether, but I do think a judicious weeding out of the varieties would do no harm—more on the matter of bedding plants anon.

The Florist Club of Baltimore is booming, and I am happy to know that President R. J. Halliday is rapidly recovering

from the severe illness that deprived the Chicago convention of his genial presence. We had hoped to entertain some of the convention delegates on their way home, a meeting of the club having been held and necessary arrangements perfected, while the convention was in session, but Chicago hospitality must have been too much for the boys, as "nary" delegate would submit to being further entertained—even the seductive Fraser failed to coax them. There is such a general feeling of regret amongst those who stayed at home, that a numerous delegation from this city to the next convention may be safely depended upon.

Baltimore, Md.

A. W. M.



POT RACK.

## Pot Racks.

From a recent inspection of quite a number of greenhouse establishments, we came to the conclusion that but few florists were familiar with the value of a pot rack, or in any event were not sufficiently impressed with its value, hence the accompanying sketch. From the reckless manner in which piles of all sorts and sizes of pots are placed in positions where a large percent are morally certain to be broken would indicate that but little real attention is paid to the expense account as far as pots are concerned. No place is so small but what a pot rack will save considerable in the course of a year.

## Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1886.

Oct. 1—Tem. morning 32°, noon 50°, evening 42°. Wind NW. Black frost last night. Potted abutilons and other greenhouse plants and placed in No. 1. Lifted and placed in No. 6 geraniums, achenranthes, begonias, alternantheras and *Echeveria metallica*.

2—Tem. 34, 57, 54. W. Potted for stock *Alternanthera aurea*, achenranthes, matricarias and Mt. of Snow geraniums. Lifted all the *echeverias* at south end of park and placed temporarily in cold frames.

3—Tem. 46, 67, 64. SW. Sunday.

4—Tem. 54, 69, 54. W. to NE. Potted *Alter. aurea*, *Thymus argentea* and stock geraniums. Took in plants wanted, and cleared flower beds, stands and vases outside.

5—Tem. 54, 65, 56. SE. Continued potting stock geraniums. Took inside caladiums and cannas.

6—Tem. 50, 66, 58. S. to SE. Finished potting stock geraniums. Planted in frame two sashes with carnations.

Propagated running geraniums. Commenced potting vincas and more achenranthes.

7—Tem. 55, 75, 62. SW. to S. Dug and took inside dahlias. Finished dividing and potting vincas. Took yuccas out of vases and cleared vases of soil. Commenced taking off the offsets from *Echeveria secunda glauca* and cleaning them for propagation.

8—Tem. 61, 77, 62. S. Potted from propagating tank heliotrope, tropaeolum, German ivy, *Cuphea platyc.*, *maurandia* and *lobelia*. Potted stock *Alter. aurea*. Took off shading rolls from No. 1. Stored vases for winter. Took off and cleaned offsets from *Echeveria s. g.*

9—Tem. 63, 77, 62. SW. to S. Potted from propagating bench *gnaphalium*, *pylogene* and *alyssum*. Propagated on bench in No. 2 offsets of *echeverias*. Nipped coleus in No. 3. Continued preparing *echeveria* offsets for propagation.

10—Tem. 60, 80, 72. S. Sunday.

11—Tem. 60, 80, 72. S. Planted out small hollyhocks received from Grace-land. Continued propagating *Echeveria s. g.* from offsets. Carted manure out of frames. Potted old yuccas taken out of vases.

12—Tem. 62, 81, 72. SW. Potted old *Echeveria s. g.* Continued propagating the same from offsets. Potted plants of *Echeveria metallica*.

13—Tem. 67, 74, 73. S. Arranged No. 1. Continued propagating *echeverias* from offsets. Commenced digging beds for tulips.

14—Tem. 70, 67, 55. SW. to W. Commenced bedding tulips. Potted old *echeverias* and propagated offsets. Took pileas and variegated *alyssums* from cold frame and placed in No. 6.

15—Tem. 44, 58, 45. W. to NW. Continued planting tulip bulbs. Propagated *Echeveria rosacea* from offsets. Cleaned up orchids.

## Cyclamen Persicum.

BY DAVID ALLAN.

The grand and continually improving improvements in the cyclamen within the past few years have made those that have seen them almost wonder. It stands at present as a decorative pot-flowering plant without a rival. The result is no doubt the untiring efforts of those English market growers, such as Clark, Smith and others, who make cyclamens a specialty. My plants begin to bloom here in October, and continue to bloom without intermission until the end of April. Last year I bloomed about 600 plants in a low span-roofed house running east and west—the cyclamen on the north bench, *Odontoglossum Alexandrie* being on the south; the temperature about 50° in cold weather, and 55° to 65° in moderate. It seemed to suit them first rate. The many brilliant shades of crimson, and the pure whites, of which there are many different forms, give the house where they are flowering a remarkably bright show throughout the long New England winter. One white had blooms  $\frac{3}{4}$  inches across, although we thought more of the forms that were smaller in diameter with more depth in flower.

Commercially I predict a future for the cyclamen in the United States. The large varieties, and especially the whites, are all sweet-scented. Its thick, fleshy leaf gives it stronger lungs to support the bud and bloom—that most ladies like to see flower under their care—than in the thin-leaved cineraria or primrose in the artificial heat of almost every dwelling house in winter.



GROUP OF CYCLAMENS.

**Culture:** Procure from any respectable seed firm a good strain of seed; no honest seed firm, knowingly, will sell any other. Sow in pans, boxes or pots, or anything else, provided they are near the height required, about 100 seeds to the square foot. Be sure they are well covered, as they swell pretty big when they become moist. Some growers soak the seed in water before sowing—a good plan; you can then detect any poor seeds you have in the lot. A good time to sow would be from September until January. In the spring, after the weather is warm enough, take seedlings from the pans, pot them in 2 and 2½-inch pots, and transfer to cold frames shaded from the bright sun. They will grow in any kind of light soil, with a little sand. Pot soft as for a soft-wooded plant. Don't use cow manure or manure of any kind amongst the potting material, but manure in a liquid form is a first-rate stimulant for them after they begin to flower. It seems to me the June bug has a special regard for depositing its eggs in cow dung, and the voracious curse of a grub plays sad havoc among the roots of cyclamens. Its other enemy is green fly. Put tobacco stems about the house or frames where they are growing.

Mt. Auburn, Mass., Sept. '87.

#### The Violet Disease.

If Mr. Louis Siebrecht will try this plan of growing violets, I do not think he will be troubled with the spot: About April 1 to 15 we break up the clumps and pot them up in 2½, 3 and 4-inch pots, in rather poor soil, and place out of

doors on bed of ashes or sand, in a shady place, so that the sun cannot shine on them. I have mine under some large oak trees in a good shade, with plenty of air: we keep the plants well watered, and shift into larger pots about Sept. 1; we use 4 to 6-inch; about the last of October they are placed in sun.

We generally place our plants in the house about the middle of December; half in house, the rest in cold frame. The cold frame plants do not bloom much until the first of February; about the middle of February we have a warm spell for a week or ten days, which starts the house plants to growing; we then place them in frame and give them one or two sharp frosts, and in a month they will be in bloom again as freely as at first. Last season we treated one lot of 1,200 in this manner, and the day before Easter we picked 4,400 salable flowers from them.

What we aim to do is to keep the violets out of the sunlight during May; we sometimes have heavy rains which cause the young plants to lose all of their leaves, but they soon come out again. During hot spells in summer the spot sometimes shows, but disappears when cooler weather comes; if our winters were a steady cold, without a warm spell, we could bloom them until April in the house. As we grow them, we get two crops of bloom. W. A. HAMMOND.

Richmond, Va.

#### Heating with Crude Oil.

In reply to the query as to value of crude oil for greenhouse heating I will

state my experience with it. I have found the results to be very satisfactory. It can be used with almost any boiler, but I prefer the upright. The burners should be placed at the front part of the boiler surface, connected with the oil supply tank or barrel by a ¼-inch pipe. A ½-inch steam pipe should be connected with the burner to force the oil through the ¾-inch hole in the burner into the surface of the boiler. An air pipe should also be connected to furnish draft.

In using the system in connection with a hot water boiler a small steam boiler must be employed to furnish steam to feed the oil. A five horse power steam boiler will make enough steam to run six or more burners. The cost of this system is but little less than with coal, when the latter is bought cheaply, but a great deal of hard work is saved to the night watchman; shoveling of coal and ashes is done away with, and it is not a pleasant job when the mercury is 25° below zero and a number of boilers to be attended to. All the work necessary is to keep the little steam boiler going and to regulate the oil supply according to the weather.

Where a place is heated by steam the cost will be less, as the main boiler will furnish its own steam for feeding the oil, and if the inspirator used to keep the water supply is of the right size to keep steadily in operation very little attention is necessary; in addition dust and ashes in the boiler-room are avoided. The cost of burner, pipes, fittings and valves is about \$25.00. The cost of steam boiler and iron oil supply tank will depend upon size.

OTTO MAILLANDER,  
Morton Grove, Ill.



### Landscape Gardening and "Garden Artisans."

I have not seen the original article on the scarcity of landscape gardeners said to have appeared in the *Century*. But I have seen it pretty heavily quoted from, and have noted that at last *you* have quoted from it.

Now you know as well as any one that this cry about the scarcity of competent garden artists is the purest nonsense. You and I could lay our hands upon a whole regiment of such within a week, and find in the ranks men whom the *Century* writer styles "garden artisans"—fully competent to command the regiment, even though its ranks were swollen by the Olmsteads and Vauxes—marching in the shoes of a Downing.

I have not personally seen any good garden work in America, and have heard of but one, and that curiously enough by a garden artisan whose employer has been appreciative and sensible enough to keep him continuously employed for a quarter century or more. I refer to Mr. Hunnewell of Wellesley, and to his gardener, Mr. Harris. I have not seen the place myself, but can rely upon the statements of Messrs. Court and Croucher, who informed me—the one as to the culture, the other as to the taste.

If there were any considerable number of Mr. Hunnewells in the country, able and willing to pay for a high class of garden improvements, they would have no difficulty whatever in finding competent men of instinctive and trained taste and of thorough horticultural knowledge, knowing moreover, from an experience which is often world wide, exactly what conveniences are required in a gentleman's garden, and their application.

The truth is that Americans are just born into their building age, and they will have to flounder through that before they can muster taste enough or leisure enough for anything like fine gardening. They are not at present prepared to be appreciative enough or liberal enough, either as regards the capital or the subsequent up-keep.

I have had considerable experience myself with Americans who think they do immense things in the direction of fine gardening. No one of them has ever evinced the slightest disposition to spend much money in the up-keep of a garden, and none whatever in improvements, if I except buildings of glass, which in the majority of cases are at once woefully extravagant and wretchedly unserviceable. To be compelled to manage the garden establishments found by the garden artisans of America is bad enough, but to be told by the writers of the magazine press that they as a class have less intelligence than common laborers, is curiously ignorant and wondrously egotistical. Pray where are the works of these writers?

I believe the only works in the country upon which much money has been spent for arboreal embellishment, grading and road making are public parks and cemeteries. A few of these are said to be splendid, etc., but it seems very strange that I have missed them. Central park, New York, is an attempted conglomeration of everything seen or heard of anywhere, interspersed by a very unusual number of parallel roads and paths, which must have cost a good deal to construct. There is not a noble or original feature in it. The planting has been done on the lines laid down in your quotation of the *Century* article, and if a record of the mortality has been kept, nothing

more than its publication is necessary to prove that architects and engineers are by no means necessarily gardeners. I know an instance within a mile or two of where I write, of a trust fund being applied, among other things, to the formation of a so-called "school of trees." The trustees went, in the first place, to an architect of some renown to furnish a list of such trees as he deemed suitable. He furnished a most elaborate one, which could not be supplied either in this or any other country; but of those things which could he had here and in Europe between 15 and 20 per cent. were utterly unsuited to the climate, and very many of them were the most expensive and rare evergreens to be found in the catalogues of English and French nurseries. These were not called for in any hesitating or halting manner, but confidently—by hundreds—and the result was that the local nurserymen began to in-

### Alternantheras Not Coloring.

One of the many questions put to the Society of American Florists recently in convention in Chicago was one the exact words of which I cannot now recall, but which was in substance: "What is the reason why alternantheras do not color this season?" The question was answered and subsequently pretty thoroughly discussed, which discussion, although instructive, must undoubtedly have left the querist in considerable doubt. The several able gentlemen who expressed their opinions were evidently well informed and quite conversant with the facts in the case, but unfortunately they each gave reasons which at least seemed to disagree. One gentleman from the east—where, by the way, an overabundance of rain has fallen this season—said that these plants never color well when growing very rapidly under the influence of a hot and very moist atmos-



NARCISSUS POETICUS ORNATUS

quire "who the great gardener was who had supplied that list of trees" and "whether he knew what he was talking about."

But enough of this. Whoever the *Century* writer may be, either architect, engineer or other, I have to tell him, through you, that there are thousands of men whom he deems garden artisans, either here or quite ready to come here if any tempting remunerative demand for them should spring up, who could very easily give points to any landscape architects or engineers or contracting excavators who have at any time practiced in America.

### A GENTLEMAN'S GARDENER.

New Jersey.

[We are inclined to believe that our correspondent's travels in America have not been very extended.—ED.]

### Narcissus Poeticus Ornatus.

This is claimed to be a grand variety for cutting from. The flower is stated to be more symmetrical than the old poeticus, which it resembles, but is in bloom at least a month earlier, and at a time when white flowers are in great demand, flowers large, pure white with a large orange cup. It is considered a most valuable plant for cutting from at Easter, also for forcing and pot culture.

phere, and very decisively pointed out that therein lay the trouble, for observation will prove that not until the atmosphere has become dry and hot, and the growth of the plant somewhat checked, will the foliage assume its lovely tints. Another gentleman who had experienced the dry, hot weather of the west, ventured to express the opinion that the gentleman from the east must be mistaken, as there was ample evidence to show that the weather was dry and hot enough there to suit the most exacting plant, and yet alternantheras, although certainly pretty well checked in their growth, did not color as they ordinarily do. The discussion interested me very much, and I regretted that other more important matters of business required that it be discontinued.

Having had some little experience with alternantheras, and having necessarily observed the various and peculiar colors the foliage of the several varieties will assume at certain times and under certain conditions, I venture to say a few words regarding them, scarcely by way of answer to the question put, because I have to confess that although I have formed a sort of vague opinion regarding the cause of the trouble which I have also experienced this season, I am unable



BEGONIA SEMPERFLORENS GIGANTEA ROSEA

to definitely point it out. It is merely with the hope that a statement of what I have noticed in the culture of these plants may interest some of the readers of the *FLORIST*. I have repeatedly noticed that early in the season, or shortly after the plants have been set out, if wet weather prevailed and the plants were encouraged to make a rapid and succulent growth, they generally had but little if any bright color; but so soon as the weather got warm, sunny and somewhat dry, and the plants assumed a less rapid but woodier growth, they began to put on their bright and beautiful tints; so in that respect my experience corroborates the opinion of our friend from the east. Another circumstance I have also frequently observed bearing on the same point is this: If alternantheras during their season of active growth are allowed to get very dry, which may readily happen in hot, dry weather, they will almost immediately lose their color, and even with constant attention they will not regain it again for a week or more. Until this season, which with us has been a very

severe one, I have always supposed that, in our climate at least, there could exist but two important reasons for the lack of color in alternantheras, and these the ones just mentioned; but my experience of the past season has disabused my mind of that opinion, and has set me to thinking.

I began planting alternantheras as usual about the 5th of June. From the time they were set out, with the exception of an occasional very light shower, they got no rain for several weeks. The consequence was they made little or no growth and showed no signs of coloring (they had none when they were planted) for about two weeks. About that time they were induced to start into growth by continual watering, which was usually at night, and they began to color nicely. At last all seemed to be well. We got a light shower, but we kept on watering. The weather was warm, but not excessively so. All the plants seemed to require was a continuance of sunny weather and a little more rain to save the trouble of watering. The weather

not only continued sunny, but got intensely warm and continued so for about three weeks; this was from about the end of June to the 18th of July. We put forth every effort to keep the beds wet and the plants growing. The former we succeeded in doing, but alas! for the latter; growth seemed to come to a standstill, and every tinge of color faded out of them. *Aurea nana*, usually a golden yellow, became quite green; *amena* and *paronychioides major*, the latter when properly colored almost crimson, turned to a dull, dirty brown. This gloomy and discouraging state of affairs lasted until the weather changed. Soon after we got a shower and the temperature became more moderate. The plants began to color and were soon as beautiful as ever I saw them. To-day they are exquisite. During that season of heat and drouth I was naturally much perplexed. One circumstance I noticed which assisted me in coming to at least a partial conclusion regarding the cause of the unusual condition of the plants. It was this: I observed that in beds or portions of them which were shaded by a tree from the midday sun, the plants continued to grow a little, and retained in some measure a certain degree of color. It was the former fact, coupled with my observations of past years, which convinced me (if I may so express it) that although a very vigorous, rank growth may destroy or prevent the presence of bright tints in the foliage of alternantheras as it often does in other variegated plants, yet a certain amount of growth is necessary to produce those tints at all. In other words, I am of the opinion that a vigorous (not succulent) healthy growth is necessary, with full exposure to the sun, to produce and maintain a good color in the foliage of alternantheras. Close observation will show that it is only the young foliage that is highly colored. The color fades away in proportion to the age of the leaf; hence growth is checked entirely by reason of drouth, excessive and scorching heat, cold, or the natural resting season of the plant, and the foliage loses its attractiveness. JAMES CURRIE, Supt. Forest Home Cemetery, Milwaukee.

#### Begonia Semperflorens Gigantea Rosea.

This begonia was disseminated in 1884 by its raiser, M. Victor Lemoine, and its name, while long, is a pretty good description of the plant. For some reason it is still quite scarce, and its cultivation is confined to a very few growers; the high price probably stood in the way of its general distribution, but it can now be had at very reasonable figures, and will doubtless become very popular, for the magnificent bunches of bright, soft cardinal flowers produced in the winter months outweigh any consideration of coarseness in its growth; it is wonderfully free in bloom and valuable for cutting purposes.

It is the result of crossing *B. semperflorens* with *B. Roezlii*. It flowers continually from October till May; it is grown in great quantities in Europe, and there is every reason why it should be better known here. If it makes too rank a growth, this may be corrected by using a sprinkling of clay loam in the potting soil. One of the most fascinating sights I ever saw in a plant house was a bench of several hundreds of this elegant begonia literally ablaze with the rosy-scarlet flowers. The accompanying cut is an accurate picture of one grown in a pot the past year. E. G. H.





### Cultural Notes.

All plants should be housed at once. Don't wait until the first frost—let it be done now.

Thin out the buds. If you are only growing to sell, thin out the buds, leaving not more than one-half on any plant, better to be only one-third left. If for exhibition, leave only one flower on each shoot. Don't be afraid about the result, let it be done and do *not*.

Be careful in watering. Very fine flowers cannot be had unless the plants are in the best condition. They must be watered when they are getting dry, and not before; if in good condition they should get dry at least once a day—then water them thoroughly. Liquid manure should be given regularly but not too strong, four or five times a week.

In damp, chilly, dull weather which comes along for three or four days at a time during October, arrange to have a little fire during the day with a chink of air on to keep a buoyant atmosphere, indeed a little heat at night after any damp day with ventilators slightly ajar will prevent mouldy, misfigured flowers—so much dreaded by good cultivators.

All plants should be staked at once so as to get them into shape before the wood is set and prevent that ragged appearance so often seen.

JOHN THORPE.

### Propagating Echeverias.

The simple method largely employed at the Chicago parks where immense quantities of these are used annually is to "put new feet on the old plants."

In the fall when the plants in the fancy beds are taken up, the echeverias are carted to the greenhouse sheds and the lower leaves pulled off until the plant is but half the original size, the long stem is then cut off, leaving only about an inch of stem and the plant then treated as a cutting. These are placed thickly together in sand beds in the greenhouse and copiously watered, care being taken to thoroughly drench the sand. After the first soaking they are watered but lightly and after being in the bed a month water is withheld almost entirely until spring. The houses are kept at a temperature of about 45° to 50°. In early spring when the room in the houses is needed for other plants, the echeverias are potted up and soon removed to hot-beds where they are kept until wanted for bedding.

Our engraving shows a plant as taken from the bed and the same prepared for the cutting bench. Plants are also propagated from offsets, but the main supply is kept up by the above described method.

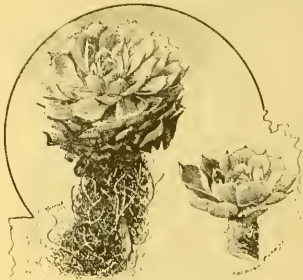
### Forcing Lilium Candidum.

So many points have been given in the pages of the *FLORIST* upon the cultivation of *Lilium candidum* that it is perhaps superfluous for me to write any more in answer to V.'s query (page 42, No. 50) upon this subject. A few concise remarks may, however, not be out of place.

Two kinds of candidums are placed in the market, home grown bulbs and im-

ported ones. The former are not really home grown, being usually imported bulbs, too small for sale, but are planted in some suitable ground and sold as home grown the following year. If these can be obtained good, they are usually the best for forcing purposes. In no case should any bulb be used for this purpose if it be of flabby substance. Plumpness and ripeness are the essential conditions. V. asks if they should be potted immediately. Directly the bulbs are received they ought to be planted. This rule reminds us that all orders for bulbs should be in the hands of the seedsman as early as possible, so that the grower can receive his goods as soon as they reach the dealer. Candidums are particularly weakened by remaining out of the ground for any length of time. If kept in a dry atmosphere they soon become of a miserable, shriveled appearance. Dampness, however, will soon produce growth. Either state is positively injurious to right conditions for successful forcing.

The soil to be used for potting should be good loam, with some manure added. The size pot should be 7-inch. When



PROPAGATING ECHEVERIAS

potted they may be placed outside, upon ashes, so that worms may be prevented from entering, and can remain there until the approach of severe frost. The question was asked at Chicago, why these bulbs are benefited by being frozen. The physiological reasons are unknown to me; all that I am aware of is the fact. One gentleman at the convention stated that it was because these bulbs are hardy. This can hardly be the reason, for there are numbers of hardy plants that are not benefited for forcing after receiving a severe freezing. During the time the pots are outside a moderate amount of water is sufficient; but when housed, and growth progresses rapidly, an ample supply can be given. The pots should be placed upon the benches close together. If no ashes or other material for holding moisture be placed on the benches under the pots, the flower stalks both of candidum and longiflorum will grow only of moderate length. In this case the plants will need more frequent watering. Strict attention should be paid to checking the ravages of green fly. In fact it should never be seen at all. If preventive measures are adopted directly the leaves appear, the plants will always be clean. A sure preventive is syringing with tobacco water twice each week.

Candidums can be had in flower by the 1st of March if kept in a night temperature of 50° to 60°. Should they, however, be needed only for Easter work, a tem-

perature of 55° at night will be found sufficient. Of course, if Easter should occur very early in the season the maximum temperature might be maintained. It is comparatively easy to retard the flowers by shading and lower temperature, should it be found that the crop will be in too early. Do not retard, however, before the flower buds are well developed; about the time that the lower bud changes color. Those that need candidums for a home retail trade should arrange for the bulbs to flower in batches. When brought in from outside, place in heat only those needed for the first crop. The remainder store in some cool convenient place where they will not occupy room needed for plants wanted for early flowering. A light place under bench or cold frame will be found advantageous. Bring into heat at intervals of three or four weeks. This method will insure candidum flowers from March until June.

A. E. WHITTLE.

### Crude Petroleum for Heating.

In response to the many inquiries as to the use of crude petroleum as a fuel for heating, we will give the following as to the way our boilers and burners are set. It makes no difference whatever as to the shape or construction of the boiler, and the furnaces need very little changing to adapt them to the use of this fuel. The boilers that we use are 24 feet long and 50 inches in diameter. Our furnace is built as follows: The first thirty inches is of fire-brick, slightly raised as it goes back, when it meets a cross wall in the fire-place, composed of fire-brick built up one course higher; the grate bars are then open for a space of four inches. A second cross wall with fire-brick one course higher is built, then the four inches air space is left again, coming from under the grate bars, to the cross, or bridge wall of the furnace. The sides of the fire-place are partially filled in with a lining of fire-brick, making the shape of the fireplace in front, almost half a circle, running up within about six inches of the boiler. The burner we use is Atkins' patent, and H. R. Probasco, of Cincinnati, is agent for the same.

The only way in which the oil can be burned with this burner is with a steam pressure of from five to eight pounds, the higher the pressure the better. Connected with the burner is a superheater, which goes into the flame directly in front of the burner, which causes the steam to be ejected into the oil, almost in the form of gas. The oil is easily ignited by using a little lighted waste in the furnaces, and after the steam has been started, turn on the oil tap. It is necessary to raise steam in a small boiler, or with fuel under the same boiler, before the oil can be ignited. It will not burn without steam pressure, but any florist can easily arrange it to keep up sufficient steam in the boilers after it is once started, to always start his oil. Once ignited, and the steam pressure going, the boiler will require his attention only to keep up the supply of water in it, until the whole amount of oil in the tank is consumed. Our experience tells us that two barrels of oil is equal to a ton of ordinary coal, four barrels being equal to a ton of best anthracite. No smoke, no dust, no ashes, simply an automatic arrangement, if the place is large enough to keep the boiler supplied with water.

For a small place (that is, a place of three or four houses) we don't think the use of crude petroleum would be advantageous, but where it is necessary to have

a night watchman to take care of the place, he can tend to some other business than shoveling coal into the fire. The cost of crude petroleum, delivered on the switch in front of our greenhouses, is 57 cents a barrel, forty-two gallons to the barrel. The tank cars in which it is shipped, hold from 120 to 150 each. Any second-hand tank, iron or wood, will do to hold the oil, but iron is preferable. By addressing the agent of the burner, the prices of oil at any point, may be obtained, also contracts may be made for a constant supply of crude petroleum. We find when the petroleum is kept in a close vessel there is none of the disagreeable odor accompanying it, and none whatever about the boiler and furnaces.

Cincinnati. B. P. CRITCHFIELD & Co.

PORTLAND CEMENT.—Mr. F. Calvert, Lake Forest, Ill., makes all the joints in his 4-inch hot water pipes with Portland cement. He has joints made two years ago with cement that are perfect to-day. I do not believe that florists as a rule appreciate the great value of cement around greenhouses. It can be applied to a great many uses, and is cheap, durable and convenient. C. B. W.

IMPROVED SASH BARS.—Among the many improvements made in greenhouse construction, not the least is the sash bar which is guttered on each side to carry off condensed moisture and thereby prevent drip. Drip can not be entirely avoided even in properly glazed houses except by some such contrivance as this. These little points should be borne in mind by those building new greenhouses. C. B. W.

KEEPING SOIL SWEET.—In potting plants how would it do to mix powdered charcoal with the soil? Would it help to keep the soil sweet. F. L.

#### SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order.

**SITUATION WANTED.**—A first-class rose grower wishes a position. Terms low; eastern man. Address W. L. M., Chatham, N. J.

**SITUATION WANTED.**—Young man, single, experienced in references. Address F. L. Florist, 25 Market St., Camden, N. J.

**SITUATION WANTED.**—By a gardener; single; experienced in private and commercial places; can furnish good references. Address J. A. G., care W. J. Stewart & Co. Brooklyn, N. Y.

**SITUATION WANTED.**—By a practical English rose and cut flower grower; 15 years' experience in this country; can make up cut-flowers. Address F. H., 3146 Olive Street, St. Louis, Mo.

**SITUATION WANTED.**—As foreman on a commercial place; long experience in growing cut flowers, bedding plants and hardy stuff. Good references. Address W. 22 Webster Ave., Scranton, Pa.

**SITUATION WANTED.**—By a boy of 15 to learn the florist business; best references; vicinity of Philadelphia preferred. Address U. M., 424 Walnut St., Philadelphia, Pa. 15.

**SITUATION WANTED.**—A young man with extended experience in all branches of commercial place; unmarried; can furnish satisfactory references; vicinity of New York preferred. Address F. NORTH, care J. B. Gale, Williamstown, Mass.

**SITUATION WANTED.**—By a competent and experienced gardener, on a private place. Salary expected \$25 a month with board and lodging, or \$45 a month if board myself. Address F. H., care American Florist, Chicago.

**SITUATION WANTED.**—By a married man, as foreman in a commercial or private place. Understands the business in all branches. Unquestionable references as to experience, etc. Address F. O. C., care Beaman & Gerdach, Newark, N. J.

**SITUATION WANTED.**—Gardener, age 38 yrs., of having 22 years' experience in all branches of gardening; nine years in good places in Scotland, seven years in the glass departments, Kew, England, six years in present situation; best references from all employers; wants situation as above, in the States where several men will be under him, can take charge of public park—well up in carpet bedding, etc., so much admired in the London parks. Address for particulars, with references, W. ALLEN, Lutworth, Aynard Park Rd., Twickenham, England

**SITUATION WANTED.**—As foreman or assistant in a first-class private place; 11 years in the business, understand all the different branches of fruit and flowers. For references and other information refer to John G. Gardner, head gardener to F. Lorillard Esq., Hoboken, N. J.

A. NELSON, Bristol, Bucks Co., Pa.

**WANTED.**—Every florist to order ready packed crates of pots—see our "ad." ask prices and fr. Orders filled instantly. Cheap frt. to all Western towns. SYRACUSE POTTERY, Syracuse, N. Y.

**WANTED.**—To rent or buy, a small florist place in good order; one within 100 miles of Philadelphia preferred. Address A. G. S. care American Florist, Chicago.

**WANTED.**—A competent, energetic man (florist), single preferred, who is willing to attend in and out-door work. An industrious man will find steady employment. Address R. MAITRE, 7 Camp St., New Orleans, La.

**WANTED.**—Young man of some experience in the florist business; must be industrious, temperate and reliable. Business—growing cut flowers for New York market. Call or address ALBERT BENZ, Douglasson, L. I.

**WANTED.**—A practical florist to take entire charge of greenhouse (steam heater), one who understands growing roses and carnations, also general stock of flowers for retail trade. A young, single man preferred. One wishing such a place can correspond with J. H. FRESCH, Stoughton, Mass.

**FOR SALE.**—Greenhouse and stock, lot 105 x 140 ft. in town of 2500 inhabitants, 12 miles of Philadelphia. Address, J. C. A., 245 Chestnut St., Phila.

**FOR SALE.**—Greenhouses and stock, in fine condition, located in New Orleans, or would be a good partner at reasonable price. For particulars address Q, care American Florist, Chicago.

**FOR SALE.**—A few hundred three and four year old Calia bulbs, also a few hundred Carnation plants. Write for prices, etc. A. H. BARROWS, Agt., Glastonbury, Conn.

**FOR SALE.**—Two second-hand hollers (in good condition), one "Weathered" No. 3 and one "Hitchings" B 11—capacity of each 350 4-inch pipe. For price address JOHN S. FOISTER, 738 Oak Ave., Evanston, Ill.

**FOR SALE.**—Just building two new greenhouses, and took out an old established business for a large trade, for sale cheap. Will sell ground alone, or give as long lease as wished, and at very easy terms. Located in a live, booming western city of hundred thousand inhabitants. Address, B. S. care American Florist, Chicago.

**FOR SALE.**—Estate of the late Alexander Greenlaw. This estate situated in Braintree, Mass., is ten minutes walk from depot. There are four greenhouses heated by hot water—one ten paces, planted two years; one in hybrids; one pink house; one violet house; each 120 ft. long. Plenty of water on the place and an engine to pump it. Expect town water to be put in next fall. There is a cottage of six rooms, and a house of twelve rooms; stable, wagon-shed, and one and one-quarter acres land. Address HOLBROOK & Fox, 12 Postoffice Square, Boston, Mass.

**FOR SALE.**—The undersigned offers her entire establishment, consisting of a large garden with two large greenhouses provided with hot water, furnaces, one dug well of good water; water supply by hydrants; dwelling, barn and out-houses, all nearly new. Five acres of land under high cultivation; garden implements, horse, wagons, cutter, harnesses, a large stock of seeds, plants, shrubbery, &c., &c. The above is situated within the city, of easy access, and the offer is in fact a rare opportunity for a live, energetic gardener, as the business is well established and remunerative. Cause of disposal is the death of my husband. Parties desirous of purchasing will please address for particulars, MAGDALENA DIXON, Eau Claire, Wis.

## WANTED.

A young man who understands making wire work for florist's use. Address, stating wages expected,

M. F. GALLAGHER,

Cor. Monroe and Wabash, CHICAGO.

## OUR SPECIALTIES.

## NOVELTIES IN ROSES AND OTHER PLANTS.

—) ALSO (—

## FLORISTS' STOCK FOR FORCING.

## HILL & CO., RICHMOND, IND.

## NOVELTIES IN ROSES.

Also the leading forcing varieties Tens, H. Tens and H. Perpetuals. 1,000 large roses in a good 7-inch pots: C. Mermet, La France, Sunset, Perles and Bon Silences, at \$25.00 per 100. Chrysanthemums, best varieties, 5 and 6-inch pots, \$15.00 to \$30.00 per 100. Bouvardias, 2½-inch pots, \$5.00 per 100. Gardenia Radicans, 85.00 per 100. Grand Duke Jasmine, 65.00 to 85.00 per 100. 3,000 American Holly, 1½ ex. opac, at \$10.00 to \$12.00 per 100. Choicest buds and cut flowers at lowest market prices.

JACOB SCHULZ, LOUISVILLE, KY.

## IMPORTED H. P. ROSES.

Worked low on the Manetta Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagation quickly. Fine plants for sale by the 100 or 1,000, at low rates. Address

WILLIAM H. SPOONER, JAMAICA PLAIN, (Boston), MASS.

## BUDED ROSES

For Winter Forcing or Spring Market Sales.

In excellent condition, large two year old bushes, grown out doors, in all the leading varieties of

## HYBRID PERPETUAL AND TEAS.

Ready for shipment on and after October 1st.

## CATALOGUE AND PRICES ON APPLICATION

TERMS: Cash with order.

## SCHULTHEIS BROS.,

Rose Growers, COLLEGE POINT, L. I.

## BOUND VOLUMES OF THE AMERICAN FLORIST

VOLUME II.

Handsomely bound in cloth with leather back and corners, and title lettered on back in gilt, may now be had from this office.

Price, \$2.25.

## AMERICAN FLORIST CO.,

54 LA SALLE ST., CHICAGO.

## ROSES.

Wishing to close out the balance of our forcing roses to make room for new propagation we are offering the following plants, which are in splendid condition, at

## Extremely Low Prices.

PAPA GONTIER, 3-in., 4-in., 5-in. AM. BEAUTY, 2½-in., 3-in., 4-in., 5-in.

THE BRIDE, 2½-in., 3-in., 4-in. C. MERMET, 2½-in., 3-in., 4-in.

BENNETT, 2½-in., 3-in., 5-in. MARECHAL NIEL, large plants.

PERLES, BON SILENE, NIPHETOS, SOUV. D'UN AMI, PURITAN.

Write for Prices.

## B. A. ELLIOTT CO., Plantmen,

Pittsburg, Pa.



## The Cut-Flower Trade.

## October Floral Styles.

BY OUR NEW YORK CORRESPONDENT.

Autumn wedding styles are in a large measure occupying our florists. The garnishing of bridal gowns, those of the bridesmaids and the maids of honor with natural blossoms which must be applied in the height of fashion requires deft handiwork. While the flowers used in the decoration of churches and residences are of the richest hues, pale colors predominate for the ornamentation of robes and for bouquets. Golden rod is used in profusion for large effects in churches, and is certainly splendid, the interiors glittering with myriad tassels which fringe cornices, copings and archings. Fred. Gordon made a magnificent embellishment for a wedding last week, with golden rod, sumac and grasses. There were arches over the aisles at the altar. The chancel rails appeared to be gilded. Pulpit, reading-desk and font looked as if burnished, and the corners of the edifice were golden.

An ivory white faille francaise wedding gown was garished with a front piece in the skirt composed entirely of lily of the valley. The piece was, of course, fitted of a light quality of silk, adorned at the florist's, so that each lily spoke was laid on like soft crinkling fringe, and then applied at the last moment, being tacked on firmly with white sewing silk. There were three lace flounces on the side breadths, and these had narrow bands above them of lilies. The train breadth is very full and perfectly plain.

A young bride in mourning wore a dress of white lisse which had a lace front that was lifted at both sides by clusters of white asters and orange blossoms. The latter being very scarce (only Mr. Wm. Wilson having them, I believe), must be used sparingly. White moire antique is extremely fashionable for brides. The fronts are covered with natural flowers instead of the pearl beads so much worn last season. The V-shaped opening in the front of the corsage is filled in also with flowers, lilies of the valley being favorite for this purpose. A fullish at the point is made with narrow moire antique ribbon and a small cluster of orange blossoms.

The "wreath of roses" is revived for brides, and nothing is so graceful a finish to the veil, which is not now worn over the face, but all the fullness drawn back. It requires artistic work, this wreath of natural flowers; the contour of the face must be studied, if it is to be becoming. Wreaths are made with coronet fronts, or sometimes just a low band, it depending altogether whether the face is round or oval. All the wreaths widen into clusters at the back, and many of them have long sprays falling over the veil. Orange flowers are used for the front of the wreath, if to be procured, and Niphetos or Bride roses in the back. A wreath of Edelweiss (the pressed flowers steamed out) around the front and roses in the back was exceedingly comely, as worn by a young bride yesterday.

Bridesmaids' dresses are trimmed with natural flowers in bands, and a high collar is made of these, meeting down the front as a vest. This style is, of course, for gowns with high corsage. Girdles of white roses, small asters or lilies are worn by bridesmaids when the gown is en train and the corsage cut low. Floral bonnets are very fashionable for bridesmaids when there is a morning wedding.

The hat is a capote frame, and covered with flowers which fringe over the front like lace and are raised somewhat back of this. Bridesmaids carry baskets of bloom instead of hand bouquets. Small French fern baskets filled with soft adiantums one side, and pink roses the other, are the most stylish.

There is a run on pink roses for all designs. Loose clusters of small roses and ferns are favorite for parties and to carry on full dress occasions. A small corsage bunch is worn to match. Birds are placed on elaborate designs. Klunder made a three-winged screen last week for a gift, with bluebirds holding the garlands on one panel, and dwarf sparrows hovering over cyperus, stephanotis and roses effectively arranged on another. The third panel was of ivy, with a garland of Niphetos buds.

Brower's pouch basket, which is pictured in this issue, is now one of the most fashionable souvenirs; it is the leading design for a return gift. The fashion of sending some floral token to friends coming back from Europe or elsewhere is now observed carefully, particularly among the Hebrews. Frequently their entire residence is handsomely ornamented with flowers. The usual gift, however, is a basket richly filled.

So far the most elegant novelty of the season is the French fern basket, which is also illustrated in this issue. This basket will undoubtedly have as great a run as did the fisherman's basket last winter, which, by the way, has been much improved for use this fall. It is made up with loose rush straw of an olive color, which very much lightens its somewhat heavy effect. The French fern basket will be filled in several ways, but the one in unison with its peculiar form will be to place clusters of Farlyense or other choice adiantums in one side and have these all pendant one way. In the other side will be roses or orchids. The basket will entirely lose its effect if it is filled with a variety of bloom.

The jockey basket is another novelty, and is decidedly jaunty. On a bamboo easel is placed a jockey cap, turned up so as to hold a bouquet. Behind the cap a whip is gracefully curled around onto the easel, very prettily adorning it. Below the cap a pair of stirrups hang easily. The only flowers used in this piece are those in the cap, which are spread out high and wide.

The fashion of sending new babies presents has brought out some charming styles in baby baskets, which are all on stands of bamboo, the latter in many instances being elaborately trimmed with flowers, ribbon and lace. The baskets which surmount these stands are of several shapes. The prettiest is a palm leaf, which is so formed as to hold pockets and cushions. The leaf is of rush straw, is beautifully lined with silk, lawn and lace, and when prepared with flowers is a beautiful object. Another basket of this kind is canoe shape, and is also very pretty. A lyre baby basket admits of more elaboration with flowers. The lyre is formed above the basket, and may be effectively festooned with foliage and blossoms.

A new design that will fill very gracefully, but which will hold a quantity of flowers, is the double pocket, which is a two-sided easel of bamboo, with an ornamental pocket on each side. This is among Thorley's novelties. Bamboo will be exceedingly fashionable this winter, it appearing in all the large designs as supports. It is sometimes jointed with nickel plate, which gives it a highly finished style.

There is an inclination to revive the white and gilt so much used in flower-holders by florists some years ago. The white and gilt work of to-day is not what it was formerly. Enamel is used at present instead of paint. Manilla rope work bleached to a soft white is the material of numerous vases, urns and baskets for flowers. It is a change from straw, and is fine and attractive. Straw baskets are trimmed with manilla ropes, and fringe of this material is used for the outside of straw designs. Tassels of manilla hemp, on which bronzed balls are hung, are highly ornamental as a finish to fringing. Tape work is another new material for flower-holders; it is more generally used in favors than for large pieces.

One of the most fascinating of the new designs for flowers is the daisy basket. This is formed of straw petals around a disc of the same material. The petals are covered with white satin, and the disc with yellow. It has a triple handle nearly three feet high, which is drawn together at the top. In this handle sits the daisy. It is, of course, protected when flowers are put in it. The handles are to be trimmed with daisies. Only Marguerites or flowers of this form are suitable for it.

The line of novelties in floral favors is very large. Shoes made of white manilla cord are particularly adapted for weddings. These shoes are in the shape of Oxford ties, and are neatly laced with cords. They are filled usually with lily of the valley, sweet peas or corn flowers. Plain gilt baskets, with frosted gilt branch trimmings, are used for favors and are filled with coreopsis. Small sun hats, lined with satin and trimmed with corn flowers, are exquisite favors. These are filled with rosebuds and finished with a bow-knot of ribbon grass. A quaint favor, very much admired, is the Quaker bonnet. This is a little basket on an easel to stand before the cover at dinner. The basket part is in the shape of a quaker poke bonnet, which is white or gray straw, and sometimes a pale pink. The poke is filled with small but choice blossoms. Little work-baskets, over which there is an arched frame very carefully adjusted that is trimmed with forget-me-nots, is one of the daintiest of fall favors. These miniature work-baskets are also trimmed with clover and grasses.

Leghorn colored ribbon is all the vogue for ornamenting designs of every description. It combines beautifully with most colors, but is particularly charming when used with purple. A casket cover made for the funeral of a young lady yesterday was formed with purple asters of several shades. A cross of adiantums laid on top. Over the arms of this cross was a wreath of pale purple asters, which was fastened with a sash of Leghorn colored satin ribbon.

RICHMOND, VA.—Trade fair for summer; funeral work very good. H. A. Catlin's store on 9th street closed this spring. Mrs. C. E. Roper has opened at 810 East Broad street. W. L. Timberlake has closed his store on 9th street. Blackwell & Warm have dissolved, Mr. Warm going with J. J. Harvey. W. A. Hammond, who has been with Harvey for the past twelve years, has opened at 321 East Broad street and reports good trade from the start. Rowe Bros. have built one house 17 x 100, and will heat with steam. Mr. Henry Bennett, of England, was in town last week. T. W. Wood & Sons, seedmen, have opened one more store, three in all.

THE AMERICAN FLORIST

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 Cents a Line, Agate; Inch, \$1.40; Column \$14.00.

Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per cent; 12 months, 20 per cent.

No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Advertisements for October 15 issue must REACH US by noon, Oct. 8. Address,

THE AMERICAN FLORIST CO., Chicago.

Catalogues Received.

John Lewis Childs, Floral Park, N. Y., bulbs and plants; Thomas S. Ware, Tottenham, London, England, bulbs; Wm. C. Wilson, Astoria, N. Y., plants; Henry A. Dreer, Philadelphia, bulbs, plants and seeds; F. E. McAllister, bulbs and seeds; E. L. Koehen, Zanesville, O., bulbs; J. A. Simmers, Toronto, Ont., bulbs; Ed. Pynaert-Van Geert, Ghent, Belgium, new chrysanthemums; Michel Plant & Seed Co., St. Louis, bulbs and florists' supplies; S. L. Allen & Co., Philadelphia, garden tools.

DICTIONARY OF GARDENING.—A careful examination of this work is still more convincing of its great value to all interested in horticulture. "It is liberally and handsomely illustrated, its descriptions are accurate and its completeness leaves but little to be desired. It is well printed on excellent paper and so handsomely bound as to be an ornament to any library. The price—\$21 for the seven volumes—is really reasonable for such an elegant and useful horticultural encyclopædia.

Flowers for President and Mrs. Cleveland.

During the centennial celebration at Philadelphia, Sept. 15-17, the Florists' Club undertook the task of decorating the rooms occupied by the president and Mrs. Cleveland, at the Lafayette Hotel, with plants and flowers. Every grate was filled with flowering and foliage plants, boxes of growing plants covered all the steam radiators, a bouquet of rare roses, lily of the valley and other choice flowers awaited Mrs. Cleveland, lotus flowers and large pink water lilies were effectively grouped, and two large set pieces were placed in the rooms before the distinguished guests arrived.

One of these was an oblong plateau of maidenhair and other ferns, small feathery-leaved Cocos Weddeliana palms, and the little green and white Caladium argyrites; while interspersed through the mass of green were just enough choice flowers to give the piece its full effect. This was placed on the center table.

The other piece was a flat design six feet high, resting on an easel. On a groundwork of ivy leaves was a scroll bearing the word "Constitution," in La Purite carnations, bordered with Perle roses. Above the scroll was a vase made of white asters and filled with gladioli and other stiff-stemmed flowers, with a single plant of Pandanus Veitchii in the middle. The vase bore the monogram "F. C."

Crossed flags of carnations and the dates "1787-1887" filled the lower part of the panel, and then a border a foot wide, made of Perle and La France roses, violets and ferns, was placed around the whole.

Wholesale Markets.	
Cut Flowers.	
BOSTON, Sept. 26.	
Roses, Teas.....	\$1.00
Perles, Niphotos, La France.....	1.00
" Mernets, Bennetts.....	4.00
" Brides.....	6.00
" An. Beauties.....	10.00
Lily of the valley.....	6.00
Japanese Lilies.....	5.00
Asters.....	1.00
Carnations.....	1.00
Smilax.....	12.50
Adiantums.....	1.50
NEW YORK, Sept. 26.	
Roses, Perles, Niphotos, Souvs.....	\$4.00
" Mernets, Dukes, Cooks.....	4.00
" Bennets.....	3.00
" La France.....	6.00
" Bon Silenes.....	1.00
" An. Beauty.....	8.00
" Papa Gontier.....	2.00
Carnations—Long stems.....	1.00
Shore.....	.50
Lily of the valley.....	8.00
Smilax.....	20.00
Chrysanthemums, per bunch.....	.15
CHICAGO, Sept. 27.	
Roses, Perles, Niphotos.....	\$4.00
" Mernets.....	4.00 @ 5.00
" Bennets, La France.....	5.00
" An. Beauty.....	12.50
" Bobs, Safranos.....	2.00
Carnations.....	1.00
Tuberoses.....	1.00
Smilax.....	15.00
Asters.....	.50
Dahlias.....	2.00
Gladioli.....	6.00
PHILADELPHIA, Sept. 26.	
Roses, Teas (but little call).....	\$1.50
" Niphotos.....	2.00
" Perles (very plentiful).....	5.00
" Bennets, La France.....	5.00
" Mernets, Brides.....	4.00
" An. Beauty.....	10.00
Carnations.....	.50 @ .75
Smilax.....	20.00

If you want FRESH FLOWERS of best quality, carefully packed and promptly shipped, order from

WM. J. STEWART,  
67 Bromfield Street, Boston, Mass.

W. S. ALLEN,  
Wholesale Dealer in

CUT FLOWERS,  
Has moved from 940 Broadway to 30 East 23d St.,  
W. S. ALLEN,  
36 EAST 23rd STREET, NEW YORK.

W. F. SHERIDAN,  
WHOLESALE FLORIST  
721 SIXTH AVENUE, N. Y.  
Vention American Florist

EVERY FLORIST  
Should have our  
New Trade Directory.  
ADDRESS,  
AMERICAN FLORIST CO.,  
CHICAGO.

NOT TOO SOON  
To correspond NOW about your Spring Catalogue. You can get it made better than ever, with less bother to you, and plenty of good cuts, by

THE FLORIST-PRINTER,  
Who has long experience and superior facilities.  
BE AHEAD OF THE RUSH  
And write for samples and estimates to  
J. HORACE MCFARLAND,  
Printer for Nurserymen, Florists and Seedsmen,  
HARRISBURG, PA.

Thos. Young, Jr., & Co.,  
Wholesale Florists,  
INCORPORATED 1885,  
23 West 23d St., NEW YORK.  
J. C. VAUGHAN,  
WHOLESALE CUT FLOWERS  
Direct all cut flower orders to cut flower department  
VAUGHAN'S SEED STORE, 42 La Salle St., CHICAGO.

WELCH BROS.,  
WHOLESALE FLORISTS,  
165 Tremont Street, BOSTON MASS.  
We make a specialty of shipping choice Roses and other Flowers, carefully packed, to all points in Western and Middle States.  
Return Telegram is sent immediately when it is impossible to fill your order.

HAMMOND & HUNTER,  
Wholesale dealers in  
Cut Flowers and Florists' Supplies  
61 West 30th Street, NEW YORK.

JOHN J. PERKINS,  
Wholesale and Commission  
- FLORIST -  
57 West 26th Street,  
NEW YORK.  
(Telephone No. 672, 30th St.)  
Branch, 34 S. 14th St., Philadelphia, Pa.  
Greenhouses, Creskill, N. J.

A. M. & J. B. MURDOCH,  
WHOLESALE  
CUT FLOWERS.  
510 SMITHFIELD STREET,  
PITTSBURGH, PA.  
SEND FOR PRICE LIST.

CHAS. E. PENNOCK,  
WHOLESALE FLORIST,  
38 So. 16th Street, Philadelphia, Pa.

C. STRAUSS & Co.  
Telephone 977-3. WASHINGTON, D. C.  
Grower of and Wholesale Dealers in  
ROSES and OTHER CUT FLOWERS  
1000 Puritan Planted for coming Winter.

CUT FLOWERS  
The choicest Cut Flowers at lowest market rates shipped C. O. D. Telephone connection. Use A. F. Code when ordering by telegraph. For prices, etc. Address,  
J. L. DILLON, BLOOMSBURG, PA.

ROSS & MILLANG,  
Wholesale : Florists,  
NO. 1168 BROADWAY.  
(Formerly at 225 5th ave.)  
Bet. 27th & 23th s's. NEW YORK.

THE EMERSON PATENT BINDER

Price postpaid, 75 CENTS.

Address American Florist Co. Chicago.

Showing the appearance of the Binder when quite full of

The American Florist

Every subscriber should have one. Other sizes furnished on application.



## Seed Trade.

SUMMARIZING the reports concerning garden seed crops, we reach the following conclusions: Very scarce—late wrinkled peas; light crop—melon, squash, cucumber, beans; fair crop—onion where uninjured by blasting. Sweet corn hurt by drought in many sections. Potatoes of good size scarce.

ENGLISH HOUSES are buying all the late wrinkled peas they can get.

THREE PROMINENT seed and implement houses in Boston are reported as about to combine.

NEW YORK.—The A. B. Cleveland Co.'s new retail store at 39 Cortlandt street is expected to be ready by Dec. 1.

LITHOGRAPHERS report many seed catalogue covers already in hand, and in style and expense surpassing former years.

THE JOHN A. SALZER Seed Co. at La Crosse, Wis., have just completed a 5-story warehouse, with fine frost-proof cellars.

AMONG the scarce bulbs in the wholesale trade now are Roman hyacinths L. Harrissii and candidum, and Narcissus Von Sion.

SEED POTATOES seem to be a short crop everywhere; 70 to 80 cents per bushel is a common market rate in many localities.

MR. STEELE, with the A. B. Cleveland Co., mysteriously disappeared while on his western trip about Aug. 5, and has not been heard of since.

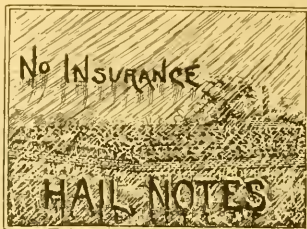
OMAHA, NEB.—The Emerson Seed Co. was incorporated Sept. 10, with a capital stock of \$15,000, \$7,500 of which is paid up. The right to increase the capital stock to \$25,000 is reserved.

REGISTERED at this office: Mr. J. Comont, London; T. Webster, Hyde Park, Mass.; Wm. Meggart, Hartford, Conn.; Pres. Am. Seed Trade Association; Chas. P. Braslan, Minneapolis; Geo. S. Haskell, Rockford, Ill.; H. A. Salzer, La Crosse, Wis.; W. H. Foster, Council Bluffs, Ia.; A. Ellsworth, Hutchinson, Kan.

FREAK OF THE CARNATION.—Mr. H. Schiller, Niles Center, Ill., sends us a carnation spray which bears two flowers, one white and the other a fine shade of pink. Mr. Schiller says he has one plant which blooms this way continually.

NEW WHITE CARNATION.—Mr. N. Singler, Washington Heights, Ill., has a seedling white carnation which promises well. It is a strong, vigorous grower, and blooms freely. The flowers are handsome, do not burst, and are very fragrant. Mr. Singler believes he has got just what he wants, though another season's trial will be necessary to test its staying qualities.

VIOLETS.—As a preventive of the violet disease Mr. D. S. Heffron, Washington Heights, Ill., mixes a barrel of slacked lime with the soil in each bench, 4 x 70 feet and 6 inches deep. He also recommends sprinkling the soil lightly with flour of sulphur. He grows the Victoria, and is never troubled with the spot after the plants are housed. He also mixes lime with the soil in same way for carnations, and considers it a benefit in keeping the soil sweet.



## Hail Insurance.

THE FLORIST of Sept. 1 gave hail insurance the biggest boom of the season when it said \$600,000 worth of glass was insured at the Chicago convention. What the cold type should have said was 600,000 square feet of glass. \$600,000 would go a long way towards paying for all the glass used in greenhouse structures throughout the United States.

JOHN G. ESLER,  
Sec'y Florists' Hail Ins. Association.

SARATOGA SPRINGS, N. Y.—A severe hail storm did much damage here Sept. 6. Many of the hail stones were the size of hen's eggs. At Ballston but a few drops of rain fell. Many trees were broken down in the village, but the heaviest damage was done to the various greenhouses. S. F. Terwilliger suffered no loss whatever, but the other florists' losses were quite heavy. Thomas Totten's greenhouses on the east side of the village suffered to the extent of three hundred broken panes. At John Ralph's one thousand panes were broken and a number of flower beds ruined. Mr. Ralph says the stones were the size of bantam's eggs. His loss will amount to nearly \$200. Allen Wells, whose houses are located west of the village, had about two hundred panes broken. The stones which fell there, Mr. Wells said, were as large as hen's eggs, but the reason he suffered no more serious damage was on account of his houses being double glazed.

## Trade Notes.

SIoux CITY, IA.—Wm. Smith has built a new house 50 x 175.

SOUTH BEND, IND.—Treanor & Rettig made a fine floral display in made-up work at the Northern Indiana fair, Sept. 15.

WASHINGTON, D. C.—W. S. Fisher, formerly chief clerk for J. R. Freeman, will open a floral store Oct. 1 at 1425 Pennsylvania avenue NW.

PALATKA, FLA.—The Florida Nurserymen's Association held its third semi-annual meeting here Aug. 9. The association was organized in November, 1886.

PROVIDENCE, R. I.—The annual exhibition of the Rhode Island Hort. society which opened Sept. 8 was one of the most successful ever given by the society. The exhibits of plants and cut flowers were large and of excellent quality; first prizes for these were awarded to Robert Johnston, Geo. Johnson, Sadie O. Crane and John R. Corp.

CHESTER, PA.—The Chester Floral Co. began business here Sept. 1, with a capital of \$5,000. D. T. Connor is a large stockholder and will be the practical head of the business, and president of the Co. D. J. Sandham is secretary. The new concern is now erecting a new carnation

house and contemplate building two large rose houses next year.

SPRINGFIELD, MASS.—The New York Floral Co., in connection with the Hampden Co. Hort. society, gave a floral show at their store, 363 Main street, on Thursday, Sept. 1. Everybody was invited to contribute to the exhibition, and a number of florists and amateurs joined hands. The exhibition was large, and the attendance also. These friendly exhibitions are calculated to promote the interests of floriculture. The horticultural society will hold a big chrysanthemum show in November.

MONTREAL.—At the annual exhibition of the Montreal Hort. society the flowers shown were hardly as good as at some former exhibitions, owing to the unfavorable weather during the summer. The chief features of the show were the tables of decorative and flowering plants. For these exhibits prizes were awarded to Sir Geo. Stephen, Hon. J. J. C. Abbott, Andrew Allan, Sir Donald Smith, R. B. Angus, C. E. Levey, Wilshire Bros., and John Molson. For specimen plants first prizes were awarded to J. Stanford, S. Ward, J. Betrix, Geo. Buddo, W. Spriggins, J. McKenna, J. Doyle, John Kirkwood, Wilshire Bros. and J. Bland. For best table design Geo. Horton received first and Wilshire Bros. second.

ST. PAUL.—Business is brightening up since the cool weather set in; there was quite a frost September 8. The new firm which it was rumored would start here proves to be L. L. May & Co.; they have already erected seven fine houses covering about 15,000 square feet of ground, located on Como avenue. A feature of the new houses is cast iron gutters between the houses, something never before seen here. The intention is to run a steam pipe just below each gutter with the expectation of preventing accumulations of ice in the gutters in winter. If it works satisfactorily (which I seriously doubt) it will be a great advantage in this climate. Two 20-horse power tubular steam boilers will furnish heat for the new place.

## Business Methods.

As a practical way of assisting those who have heretofore neglected to keep accurate record of their business transactions we have printed a quantity of the debit and credit tickets described in our issue of November 1, 1886, page 104, and will furnish them to our readers at cost of printing and mailing. Note adv. of same in advertising columns.

## Thinks He was Misunderstood.

At the meeting of the S. A. F. I asked the question: "What inducements can this society offer to retail florists to become members?" Mr. Carmody was delegated to answer the question. I was not satisfied with the way which Bro. Carmody answered the question, and I then proceeded to show some of the inducements which could be offered, and one of the principal things I did say was that the society should help us to boycott wholesale dealers that sold as cheap retail as they did wholesale. At Mr. Whittall's request J. C. Vaughan stated in what way he thought a florist could make it profitable to join the S. A. F. In answer to Bro. Vaughan I said if I adopted his advice it would not help me to sell an extra 10-cent bouquet.

I saw that my question was misunderstood by the majority of those present. The meeting immediately after this cut off debate on the question,

and threw the motives which prompted me to ask it in a very doubtful light; and hence in the last number of the FLORIST I find Bro. Whittle endeavoring to give me a "a right smart" shaking up.

No doubt he thinks I am one of the kickers—and maybe I am—but I recognize the value of organization as much as any florist in America, and I will kick more if I get a chance, because I want to make the platform of the S. A. F. so broad, so brotherly and so fraternal that we can say to every lover of the floral art: "All aboard for the convention." Now as regards the association I want to say in conclusion: I am in, and I intend to stay in, and I do not want any of the brothers to try and "Whittle" me out because I do not happen to think just as they do. I do not want to be looked upon as a disturber of the peace and progress of the S. A. F. The society is the result of the arduous and honest toil of industrious and zealous builders, and that it may withstand the whirlwinds and tornadoes of time is the earnest prayer of Elgin, Ill. B. O'NEIL.

[We do not think Mr. O'Neil's question was misunderstood, but are willing to admit that there may be many more points not covered by the discussion, and Mr. O'Neil should send them in.—Ed.]

**PROTECTING WOOD FROM ROT.**—A means of preserving wood from rotting was accidentally discovered by Herr K. Fleischer of Gonobitz a few years ago. He was about making a preparation of coal tar and ashes for the purpose of driving away ground fleas and beetles from his garden. Just as he had mixed the materials together he was called away from his work, and on returning found that instead of tar in the ashes there was a kind of woody texture. Astonished at the transformation, he tried the experiment over and over again, and invariably with the same result. Just about this time he had occasion to re-floor an outdoor room, where the boards came into almost immediate contact with the ground, and took the opportunity of testing the preservative effects of this mixture by smearing the under side of the planks with coal tar, and sprinkling them liberally with ashes, a thin layer of which latter was also sifted over the ground. The procedure proved eminently successful, for the floor is still in perfectly good condition, and not in the least attacked by fungoid growth, while on all previous occasions, though laid down with equally good material, it had always required constant repair, and was generally quite rotten in less than two years.—*London Garden.*

## FOR SALE.

### THE CUTS

USED IN ILLUSTRATING THIS PAPER.

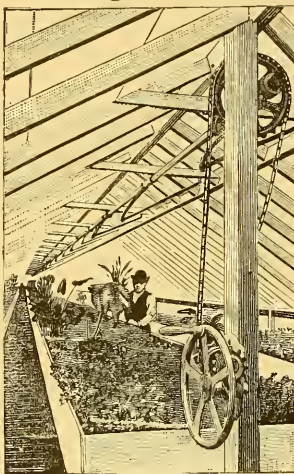
Write for prices on any which you have seen in previous issues and would like.

AMERICAN FLORIST CO.  
CHICAGO.

## HALES' MOLE TRAP

For destroying ground moles in lawns, parks, gardens and cemeteries. The only PERFECT mole trap in existence. Guaranteed to catch moles where all other traps fail. Sold by seedmen, Agricultural Implement and Hardware dealers, or sent by express on receipt of \$2.00 by H. W. HALES, RIDGEWOOD, N. J.

## Challenge Ventilator.



Without a rival either in Cost, Speed in operation or Security in case of storms.

No Liability to Break or get out of order.

Simple in construction, perfect in operation. Parties wishing estimates will be cheerfully furnished with the same on application. In all cases, please give the following dimensions:

- 1st. Give the length and depth of sashes.
  - 2d. Number of sashes to be lifted.
  - 3d. The length of the house.
  - 4th. The height from the walk to comb of the roof.
- For estimates, prices, or further information, address—

QUAKER CITY MACHINE WORKS,  
RICHMOND, IND.

ONLY POTTERY MAKING A SPECIALTY OF

## FLOWER POTS

FOR FLORISTS.

THE WHILLDIN POTTERY CO.,  
713 & 715 WHARTON ST.,  
PHILADELPHIA.

## SYRACUSE POTTERY

READY PACKED CRATES OF POTS

Shipped at buyer's risk and freight; cash with order, price per crate of 3,150. Thumbs (1½ x 2 in.)... \$8.25;  
2,625 2½-inch, \$8.25; 1,875 2½-inch, \$7.50;  
1,150 3-inch, \$8.75; 875 3½-inch, \$8.50;  
600 4-inch, \$9.75; 350 4½-inch, \$9.50;  
320 5-inch, \$1.40; 160 6-inch, \$3.50;  
1,300 special 3-in., \$6.25; 1,700 No. 2 Rose, \$7.00;  
Lower freight rates; E. St. Louis 57c a crate; St. Paul 81c a crate. Write for prices and list. Samples of 13 sizes given with first order. Orders filled instantly. Large stock of 20 sizes.

J. N. PERKINS, Manager, Syracuse, N. Y.

## FLOWER POTS.

A FULL STOCK OF THE  
BEST MADE WARE  
CONSTANTLY ON HAND.

These Pots are the LIGHTEST, STRONGEST and most uniform of any on the market, and will be furnished by the 1,000 or in car load lots at usual rates.

Write for estimates on large lots.

GEORGE W. MILLER,

(Successor to MILLER & HUNT.)

Wright's Grove, CHICAGO.

## GROWTAGE'S PATENT BUILDING FOR HORTICULTURE



—GLAZED WITHOUT PUTTY.—  
Endorsed by the New York Horticultural Society. Illustrated Circular mailed on application. Plans and estimates given for every description of Horticultural Buildings.

H. J. GROWTAGE,  
76 Myrtle Avenue, BROOKLYN, N. Y.

## PATENT PLANT BED CLOTH.

SUBSTITUTE FOR GLASS ON HOT-BEDS, COLD FRAMES ETC.



Equal to Glass Sash, at one-tenth the cost. Protects from Frost; allows healthful ventilation, promotes hardhood and rapid growth; keeps beds warm. Widely known and used all over the United States by florists and gardeners.

Three grades, price by the piece, 3 cts., 6 cts. and 9 cts. per yard, 36 inches wide.

Don't Shrink or Decay rapidly. (Discount on hale lots). Circulars and samples free by mail.

U. S. WATERPROOFING FIBRE CO.,  
56 South Street, NEW YORK.

## GREENHOUSE SYRINGES.

Three New Patterns. Low Prices. Good workmanship. Twenty-one other varieties. Length of Barrel, 18 in.; Diameter, 1½.



No. 10.

No. 10—Conical Valve Syringe, full size, two Spray Roses and Jet. Side attachments.

No. 11—Open Rose Syringe, full size, two Spray Roses and Jet. Side attachments.

No. 12—Open Rose Syringe, two Spray Roses and Jet. Side attachments.

These Syringes are made with special reference to those who desire a low-priced working Syringe. Every Syringe we make has our name and address on the Barrel. Manufactured by

ROBT. T. DEAKIN & CO.,  
12th & Buttonwood Sts., Philadelphia, Pa.



## TRY DEERE'S

### GARDEN SEEDS

Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free.

HENRY A. DEERE,  
Philadelphia

## SOMETHING NEW

—IN—

## Heating Apparatus

—FOR—

## GREENHOUSES.

Send for Illustrated Catalogue.

J. D. CARMODY,

EVANSVILLE, IND.

## ATOMIZER & SPRINKLER SELLS ON ITS Own Merits.



Spray appears like fog. Best sprinkler in the world. Sprinkles so even. Excellent for window gardening, flowers & house plants. Moistens them as if by a fog. Excellent for duster. Fills instantly; it's useless impossible to describe here. Enclose stamp for illustrated pamphlet and price to agents. Remember, no stamp, no attention. M. GOLDMUN, Patentee, Pittsfield, Mass.



## Portland Cement.

I can testify to the usefulness of this material, as stated in reference to repairing woodwork with Portland cement. A few weeks ago the threshold and door jambs of our stove-hole had rotted away. The builder suggested instead of repairing the decayed parts with oak to repair it with cement; so the threshold was laid with very hard white bricks in Portland cement, and a scarf of cement was put to the jambs in the way Mr. Smythe described some time ago. In a couple of days it had set as hard as stone, and the builder assures us that it will last as long as new timber at less than half the trouble and expense.

About seven years ago, being at Portsmouth, I called upon a nurseryman friend of mine who had just begun to build a greenhouse; he had got in the foundation and had begun to lay the hot-water pipes, which he was doing by laying the pipes before he built the walls, &c., because it was much easier to do so than after the house was built. He had built up some brick piers to rest the pipes on to the level required, and was laying the pipes in their places, keeping them in position at the sides and in the sockets with wooden wedges. After making them quite firm he proceeded to fill up each joint very carefully with Portland cement about the consistency of builder's mortar; and then formed a rather thick fillet on the outside at the edge of the socket. The work was done with his hands without using a trowel. In reply to a question, he told me he never used India rubber rings, as they would cost 9d. each, and the cement costs only a few pence, and he could do it himself without any help. Heat from the water has no effect on the cement, it does not crack or part from

the metal, the joints being as perfect as any material could make them, and no case of failure has come to my notice. There is a nurseryman in this neighborhood who has seven greenhouses, all of which are heated with one large saddle boiler and 4-inch pipes, and every joint is made with Portland cement—the only precaution taken is to see that the pipes are wedged up securely before the joints are made, so that they may not shift on the piers or in their sockets—for if that were to occur before the cement hardens, the joint might be imperfect. If any one is timid lest the joint next the furnace should be injured by the heat of the fire, iron cement or any other fire-proof material may be used; this is a precaution I should always take myself.

Some few years ago on going into my fern-house I found one of the joints was leaking—quite a large stream. My first thought was to let all the water out of the pipes, and send for the pipe-layer to repair the joint, but considering it would take considerable time to do that, I determined to stop it myself, so with some tow I caulked the joint, which thus checked the leakage somewhat, and afterwards by throwing dry cement on to the leak, and persevering with it for half an hour

the leak was stopped, and I then formed the joint into shape with the moist cement. This joint is now as perfect as when it was made.—*C. Dimmick, in Gardeners' Chronicle.*

## A Florists' Club Needed.

At the Minnesota state fair which closed last week but two florists made exhibits, the two being Mendenhall and Vazatka, both of Minneapolis. The premiums for plants and flowers amount to only \$350, and half of this is for amateurs. Why cannot the florists of St. Paul and Minneapolis form a trade organization and make an annual exhibition independent of the State Hort. society? If the trade in this section would take hold with a will, they could make a grand show, which would be of incalculable benefit to every florist connected with it. AUG. S. S.

CUT FLOWER SUBSTITUTION.—While so much is being said about plant substitution, how about substitution in cut flower shipments? I order 100 Mermets, and receive 80 Mermets and 20 Perles. I already have more Perles than I can use. Should I be expected to pay for the Perles, which I did not order? R.

## NOVELTY! NOVELTY! NOVELTY!

## SPIRÆA PALMATA ALBA

Awarded a First-Class Certificate in London on the 17th of June, 1885.

**Strong Plants, \$36.00 per 100.**

**A. M. C. JONGKINDT CONINCK,**

*Royal Tottenham Nurseries, DEDEMSVAART, near Zwolle, NETHERLANDS.*

We can now furnish in any quantity desired Debit and Credit Tickets of which we give below full size samples.

DEBIT.

168

CREDIT.

188

The debits are printed in black and the credits in red, so they can be readily distinguished. They are put up in blocks of 100; 50 of each, placed back to back; thus but one block will have to be carried. By means of these tickets an entry of a sale or receipt of goods can be made anywhere—in the house or in the field—and afterwards filed. Tickets for each transaction in your business will make data from which a book-keeper can readily work. With this simple and easy means of keeping a record of your business can you afford to neglect so important a matter?

Price of Tickets, postpaid, 100, 20c.; 200, 35c.; 300, 50c.; 500, 75c.; 1000, \$1.40.

**AMERICAN FLORIST COMPANY,**

54 LA SALLE STREET, CHICAGO.



## Dutch Bulbs.

*R. van der Schoot & Son.*

HILLEGOM (Near Haarlem)  
HOLLAND.  
ESTABLISHED 1830.  
GROWERS OF

Hyacinths, Tulips, Crocus  
Narcissus, Lilies, Etc.

Intending purchasers, before or-  
dering Bulbs, write us for a  
Catalogue.  
Mention Am. Florist.

**AUGUST RÖLKER & SONS,**  
NEW YORK.

—Supply the Trade.—

## DUTCH BULBS!

Catalogues on application.

**C. H. JOOSTEN,**  
IMPORTER,

3 Coenties Slip, NEW YORK.

Mention American Florist.

## ATTENTION FLORISTS!



FIRST QUALITY ONLY.

**LILIUM HARRISII,**  
4, 5, 6, 7 and 8 inches,  
\$8, \$10, \$15, \$20 and  
\$25 per 100.

First-Class SMILAX SEED  
at \$1.50 per oz.

Intending purchasers, be-  
fore ordering, write us for a  
catalogue.

**W. M. H. SMITH**  
SEEDSMAN,

1018 Market St., PHILADELPHIA, PA.

## FRENCH AND AMERICAN NOVELTIES FOR 1887

—IN—

ROSES, CARNATIONS, CHRYSAN-  
THEMUMS, GERANIUMS, ETC.

Special offer of

OUR NEW SEEDLING WHITE CARNATION  
**SILVER SPRAY,**

The Best White for Florists' use.

We have also a splendid stock of Geraniums and  
Fuchsias in 2½-in. pots, of last spring's propagation.  
Our Fall Price List with prices and descriptions  
now out; send for a copy.

**W. P. SIMMONS & CO.**  
GENEVA, OHIO.

☞ We issue no Retail Catalogue.

## CARNATIONS, &C. Superstius Stock.

500 Hine's White, strong and bushy..... \$8.00  
500 Garfield, strong and bushy..... 8.00  
250 Double White Bourdins, strong and bushy 10.00  
300 Geraniums from 2½-in. pots..... 3.00  
250 Cyclamen, 2½-in. pots, nice mailing bulbs... 5.00

**E. HALL & SON, CLYDE, O**

We have

## FINE STOCKS

OF THE FOLLOWING:

**CHRYSANTHEMUMS** In Great Variety.

**GERANIUMS** Double and Single, very best kinds.

**HELIOTROPES** 6 Fine Kinds.

**FUCHSIAS** 10 Best Old Kinds.

**FUCHSIAS** 8 Best New Kinds.

*Begonia Metallica. Abutilon Thompsonii Plena.*

Write us if you want any of the above, as all the plants are strong, in fine condi-  
tion and sure to please.

**V. H. Hallock, Son & Thorpe,**  
EAST HINSDALE, NEW YORK.



A LARGE STOCK OF SELECTED

ROMAN HYACINTHS, LILIUM HARRISII,  
FREESIA REF. ALBA, and a fine line of 15  
varieties forcing Narcissus, dbl. and sgls.

LILIUM CANDIDUM, large bulbs; also a full assortment  
of DUTCH HYACINTHS, TULIPS, CROCUS, &c., from the  
best Holland growers. Select florists' seeds, Fanny, Primula,  
Cineraria, &c. Send for Price List, now ready.

I am now booking orders for BOUQUET GREEN,  
WREATHING and HOLLY. Let me have  
your orders early.

**JAMES KING,**  
170 LAKE ST., CHICAGO.

**F. E. McALLISTER,**

—WHOLESALE DEALER IN—

**Seeds** For the Florist Market, Garden-  
er and Farmer. **Requisites** Such as Baskets, Im-  
mortalles, Grasses, Mosses, Bouquet Pa-  
pers, Fannas, Plumes, etc. **Bulbs** For the Green-  
house or Gar-  
den.

22 Dey Street, - - - NEW YORK.

**= TO FLORISTS =**  
**BULBS, SEEDS, SUPPLIES,**  
**BOUQUET GREEN, MOSSES, &C.**  
**J. C. VAUGHAN, CHICAGO.**

**LILIUM CANDIDUM,** Extra select..... per 100 \$5.00  
Fine Imported Bulbs, per 100 \$4.00, per 1,000 \$35.00

**FINE SHEET MOSS, by Bale or Barrel.**

**MICHEL PLANT & SEED CO.,**

718 Olive Street, ST. LOUIS, MO.

**SPIRÆA JAPONICA.**

Per 100  
FINE CLUMPS..... \$ 6.00  
LARGE "..... 10.00

**E. SHEPPARD & SONS,**

224 Fairmount Street, LOWELL, MASS.

## FALL BULBS.

HYACINTHS, named and in colors.

TULIPS, double and single.

HYACINTHS, Romans.

NARCISSUS, double and single.

Lilium Harrisii, Lilium Candidum, Lilium

Auratum, Lily of the Valley tips and shoots,

Freesia Refracta Alba.

And other fall planting bulbs. Catalogue free.

**A. GIDDINGS, DANVILLE, ILL.**

**Bulbs! Bulbous Roots!**

**HULSEBOSCH BROS.,**

Overveen, near Haarlem, Holland.

The only growers of whose firm there resides a

member in the application. Address

P. O. Box 3118, New York City.

Hyacinths, fine mixed, per 100, \$5.00.

Tulips, fine mixed, per 100, \$1.00.

**BULBS! BULBS! BULBS!**

Before placing your order for HOLLAND BULBS  
write me for my trade list. I have made special  
arrangements with some of the largest growers  
in Holland, and can offer you TERMS and  
PRICES better than any other firm does. All  
orders over ten dollars will receive a CREDIT un-  
til May 1, 1888. Write for terms and prices.

**E. HIPPARD, Youngstown, Ohio.**



## Boston.

Fall trade begins very slowly this year. Twombly & Sons have just completed extensive alterations whereby they nearly double the size of their store, and have put in a new window which is the finest show window in the city.

During exhibition week there were two large auction sales of plants. W. C. Wilson of Astoria and Jas. Hendrick of Albany sold on Wednesday, and Siebrecht & Wadley on Saturday. The stock of the latter was principally palms, some very large, and all of best quality.

On Sept. 22 Norton Bros. decorated for the Chickering wedding. The decoration was somewhat of a departure from the usual custom, for with the exception of a superb basket of long-stemmed roses on the table, no flowers or flowering plants were used about the house, palms, crotons and other tropical show plants being depended upon entirely. The effect, however, was good, and the massing of these plants about the hall and stairways, in the windows and at the main end of the reception room was very pleasing.

The September meeting of the Gardeners' and Florists' Club was the most successful yet. Many new members were added, and Mr. Robt. Farquhar gave a very interesting account of his experiences among the bulb farms of Holland. He described the methods of propagating, planting, growing, packing and selling the bulbs, paying particular attention to hyacinths and tulips. Many portions of his account were quite amusing, particularly where he told about one bulb merchant who took him out of town to show him his magnificent bulb farm, and on the following day another equally voracious bulb merchant took him out to see *his* farm, which proved to be the same identical field. Truly "there are tricks in all trades but ours," W. J. S.

## New York.

The bulb sales are brisk, and these are busy days in seed stores.

Palms, crotons and azaleas are bringing high prices at the auction sales.

Lee of Union Square has the smallest show window, and one of the prettiest.

Adolph L. Moul't will give a grand fall show previous to that of the Hort. society.

Mr. Henry Siebrecht is making marked improvements in his Fifth avenue establishment.

Wm. C. Wilson's variegated niphotos is a charming combination of pale pink, deep pink and yellow.

The third meeting of the Florists' club was held in W. S. Allen's new store Sept. 14, and was a very sociable affair.

Alex. McConnell has put a plate glass reflector in one side of his handsome window, which is an excellent addition.

Albert Benz has a new fawn-colored carnation. He has brought from Europe a number of novelties in these favorites.

The white Souv. d'un Ami, which is the novelty of the greenhouses of George Welch of Ramsey, New Jersey, is pronounced a very beautiful and desirable addition to the rose list.

I understand that S. T. N. Cottam is projecting a grand flower show in connection with the Eden Musee, to be held the week previous to the chrysanthemum exhibition of the New York Hort. society.

Flowers are retailing as follows: Perles, Souvs, Niphotos and Bennetts, \$1 a dozen; La France, \$1.50; Am. Beauty, \$3; Bon Silene, 50 cents; Mad. Cusin, \$1; hybrids, \$3, and carnations 40 cents to 50 cents a dozen.

W. S. Allen is now established in his new store, 36 east Twenty-third street. It is 20 x 85 feet, and very handsomely fitted up; the ice-box is of hard wood, and is probably the finest in the country. His private office is richly furnished, and the whole place is certainly a credit to the proprietor.

A decided advance in good taste is noticeable in the store windows of our florists. As a rule these are now mossed instead of showing oilcloth or painted boards, and pretty effects are made with a cluster of plants and flowers instead of a line of vases and pots of many sizes containing a general collection of bloom.

The Osborn orchid sale netted over \$3,000. Mr. John Thorpe took the celebrated Vanda Sanderiana to Boston for exhibition at the show there. This is the plant that Henry Siebrecht bought for \$470. A spike of this vanda with four blossoms on it was sent to Mrs. Langtry the first night of her performance here this fall, and she wore it with a superb costume.

## Chicago.

James Farrell has recovered from his long illness.

Business is picking up rapidly and is quite satisfactory for the season.

Edward Falardeau a former New Yorker is now chief designer for M. F. Gallagher. The call from retail buyers for American Beauty roses is increasing to a marked extent.

W. J. Downs has built a rose house 20 x 50, at Evanston. M. Weiland is also building a new violet house 100 x 20.

Joseph Curran has returned from a two weeks trip through the west. He returned thoroughly impregnated with the feeling that there is no place like home.

Flowers are retailing at following prices: Perles, Niphotos and good Bon Silenes \$1 a dozen; Mermetts, La France and Bennetts \$1.50; American Beauty \$3; carnations 25 cents; dahlias 50 cents; smilax 50 cents a string.

At Niles Center F. Stielow is building two new houses, 75 x 20 each, for chrysanthemums. A. J. Harms is remodeling his place and adding several new houses. Adam Harrer is also building three new houses 100 x 18. Richard Cogan has taken a partner and the new firm has just completed four new houses, 20 x 100 each. A move is on foot to have the name of the place changed from Niles Center to Florists' City. It certainly would be most appropriate, as growing flowers is the principal industry.

## Shipping Plants by Express.

The custom among florists in shipping plants in summer is to pack them in flats six or seven inches deep leaving the tops exposed as much as possible. The charges for express on all such packages are one and one-half rate. Now if these plants are packed in cases about fifteen inches deep there is a saving of one-third in express charges. All plants shipped in cases deep enough to admit of one or two slats being nailed upon the top, will go at regular rates.

We have just received fifty bouvardias shipped only thirty-five miles and the express charges are \$2.40. If these same plants had been shipped as I suggest, the expense would have been 80 cents less. Is not this worth considering when figuring accounts for the year's profit?

Nashua, N. H. GEO. E. BUNTON.

## ✻ ORDERS ARE STILL COMING IN FOR ✻ PURITAN.

Don't allow it to be said that you are an old fossil; be progressive, and plant the new Roses. Write for prices of Puritan.

**MRS. JOHN LAING.**—Five plants of this grand Hybrid will be ready for delivery again this Fall.

**METEOR.**—This is a wonderful Dark Crimson Hybrid Tea.

No Florist can afford to be without the above Roses. Write for particulars to

## CHAS. F. EVANS,

108 S. 12th Street, - - - PHILADELPHIA, PA.

Double White Primulas.

Ready for flowering pots, \$10 and \$12 per 100, out of pots carefully packed.

S. TAPLIN,  
DETROIT, MICH.

ROSES.

Per 100  
Cocks, Mermets, S. d' Ami, 4 1/2 inch pots.....\$ 6.00  
Bon Silene, Adam, Safrano, 7 inch pots.....5.00  
Mad. Watteville and Mad. Cusin, 4 1/2 inch pots...\$ 8.00  
Cocks, one year, strong, 4 1/2 inch pots.....10.00  
Hybrid Roses from open ground.....10.00  
Tea.....8.00

CARNATIONS.

Peerless, Edwardsii, Hieze's White, Portia, Jas. Garfield, Mrs. Garfield, Hinsdale, Crimson King, Maurendia and Philadelphia, \$5.00 and \$6.00 per 100.  
Fred Johnson, The Century, Aleazarre, Sunrise, Quaker City, \$6.00 and \$8.00 per 100. Special Rates per 1000.  
Our Carnations are all grown on new soil, and are in good healthy condition.

ENGLISH IVY, 3-inch, strong, \$5.00 per 100.  
I. C. WOOD & BRO., Fishkill, N. Y.

DOUBLE PRIMROSES.

Extra Large  
CANE STAKES FOR ROSES.

ROSES.

BRIDE, DUKE,  
NIPHETOS, PERLE,  
BENNETT, LA FRANCE,

And others. All grown from selected wood for bench planting.

SEND FOR SUMMER TRADE LIST.

GEO. W. MILLER,  
(Successor to Miller & Hunt.)  
WRIGHT'S GROVE, CHICAGO.  
Mention American Florist.

OUR NEW TRADE  
DIRECTORY

Contains over  
6,000 Names of (Live)

Florists, nurserymen and seedsmen, in the United States and Canada.

PRICE ONLY ONE DOLLAR.

AMERICAN FLORIST CO., Chicago.

CARNATIONS.

We offer to the trade very strong plants, including the following varieties:

HINZE'S WHITE, SNOWDON, DEGRAV, PHILA, PORTIA, LA FURITE, C. KING, CHESTER PRIDE, &c.

PER 100, \$10.00.

Address, BRENNEMAN & PETTERSON,  
HARRISBURG, PA.

My Catalogues

WHOLESALE AND DESCRIPTIVE  
for 1887, of Bedding Plants, Roses, Palms, Orchids, etc., mailed to all applicants. Large stock of the following on hand at cheap rates: *Ampelopsis Veitchii*, various sizes *Tea*, and *Hybrid Roses*, all the leading sorts, named *Chrysanthemums*, *Dracæa Indivisa*, various sizes, *Echeverias*, *Small Ferns*, *Geraniums*, double and single, best named sorts, *Areca Lutescens*, in 2½, 4, 5, and 6-inch pots, *Lalania Borbonica*, *Seaforthia Elegans*, *Oreodoxa Regia*, *Corypha Australis*. Other Palms, such as *Cocos Weddelliana*, *Chamærops Excelsa*, *Phoenix Reclinata*, *Phoenix Rupicola*, *Phoenix Tennis*, *Kentias* of sorts. *Glaziovra Insignis*, fancy named *Clematis*, and other vines, etc. Prices given on application.

WM. C. WILSON, FLORIST,  
Steinway's, Astoria L. I.

SET OF 30 RAREST, MOST BEAUTIFUL  
CHRYSANTHEMUMS,

By Mail or Express.

35 VARIETIES JAPANESE LILIES.

JAPANESE AND CHINESE FRUIT TREES.

CHOICE ORNAMENTAL SHRUBS  
EVERGREENS, BAMBOOS,  
MAPLE, PLUM, FERN.

Send for Catalogue. Address  
H. H. BERGER & CO.  
P. O. Box 1501. 135 and 137 Washington Street,  
SAN FRANCISCO, CAL.

PLANTS  
—FOR—  
WINTER DECORATION

—O—

We can spare a fine selection of large plants, very serviceable for winter Decoration, such as *Ficus indica*, or *Banyan Tree*, one of the most serviceable for general use; *Ficus elastica* and *Chauverii*, *Oreodoxa regia*, *Cocos romandiana*, *Seaforthias*, *Caryota urens*, and a variety of hardy Evergreens. Price and size on application.

MAITRE & COOK,  
NEW ORLEANS, LA.  
St. Charles Ave. and Clinton St.

THOMAS S. WARE,

HALE FARM NURSERIES,  
TOTTENHAM, LONDON, ENGLAND.

SPECIALTIES:

Hardy and Forcing Bulbs, Narcissus, Lilies, Gladiolus, Chionodoxia, &c. Dahlias, the largest stock in Europe; Carnations, Forcing Pinks, Chrysanthemums, Pyrethrums, Pæonias, Gooseberries, Moss Roses, Hardy Herbaceous Plants, &c., &c.

Per 1000  
Narcissus Obvilleris: the finest Trumpet forcing Narcissus, in select bulbs . . . @ 1008  
Narcissus pseudo scoticus (the garland daffodil), a fine, early forcing variety . . . @ 408  
Chionodoxia Lucillæa, fine roots . . . " 258  
Freesia refracta alba . . . " 908  
Freesia Leitchii Major . . . " 908  
Lilium Chaledonicum, the true scarlet Martagon lily . . . per 100, @ 308  
Lilium Martagon Album, the white Martagon lily . . . per doz. @ 308  
Lilium Pomponium, one of the earliest bright scarlet flowers . . . per 100, @ 408  
Lilium Browni, one of the finest trumpets, 10-inches long, inside pure white, outside purple . . . per doz. 248, 308 and 368  
Lilium Giganteum, per doz. 248 to 608; extra large roots . . . each, 78 6p and 108 6p  
New Cactus Dahlia "William Pearce," deep yellow flowers, very free . . . per doz. @ 128  
New Cactus Dahlia "Mrs. Hawkins," rich sulphur shading to white . . . per doz. @ 128  
Cactus Dahlia "Cochineal," rich velvety colored flowers . . . per doz. @ 98  
Cactus Dahlia "A. W. Tait," pure white flowers, very fine . . . per doz. @ 128  
Pompone Dahlias in variety, my selection per hundred, 408 . . . per doz. 68  
Show and Fancy Dahlias in variety, my selection . . . per hundred, 408 per doz. 68  
Single Dahlias in variety, my selection, per hundred, 408 . . . per doz. 68  
Perpetual Carnations in many fine varieties . . . per hundred, 1008 and 1308  
Carnation "Gloire de Nancy," fine pure white, clove-scented flowers . . per hun. @ 408  
Old Crimson Clove . . . per hun. @ 208  
Single Pyrethrums, in fine varieties, Per hundred . . . @ 308 and 408  
Double Pyrethrums, in fine varieties, Per hundred . . . @ 308 and 408  
Phloxes, in fine varieties . . . per hundred @ 308  
Florists' Pinks, in fine varieties, per hun. " 308  
New Chrysanthemum "Mrs. H. J. Jones," yellow sport from Ethel, very late, per doz. 128  
New Chrysanthemum "Golden Gem," Japanese form, deep chrome yellow flowers per doz. . . . . @ 188  
Delphiniums, in first-class variety. Per hundred . . . @ 608 and 808  
Delphinium Belladonna . . . per hundred @ 408  
Double Herbaceous Pæonies, in fine varieties . . . per hundred, 100 and 1208  
Single Herbaceous Pæonias, in fine varieties . . . per hundred @ 100 and 1208  
Pæonia officinalis rubra plena, the old red peony . . . per hundred @ 408 and 608  
Pæony tenuffolia plena, pretty deeply divided foliage, double crimson scarlet flowers per dozen . . . 128, 188 and 248  
Pæony Whiteji. fine double white flowers per dozen . . . 128 and 188  
Tree Pæonies, a splendid collection of all the best named sorts . . per doz. 308 and 368  
Extra fine . . . " 488  
Old Red Moss Rose, forcing stuff, per hundred, 258 . . . per thousand, 410 108  
Gooseberry "Industry," two years, per hundred, 158, per thousand, 1408; Strong, three years . . . per hundred, 258  
Gaillardias, several fine new vars. . per hun. 608

Full descriptive catalogue may be had upon application.









## The Hollyhock Disease.

Where the plants are badly nourished, the hollyhock fungus is giving trouble, and when the leaves are much infested there is no chance of obtaining fine blossoms. It is probable that the hollyhock fungus may have been in existence (vegetating quietly on some member of the mallow family) for many years, but its introduction among cultivated plants is of comparatively recent date. In dry, hot summers it is a terrible pest, and the only way to cope with it successfully is to give the plants generous cultivation from the first moment of their existence, whether raised from seeds or cuttings. In dealing with the living organisms of this character—which are so minute, and so easily carried from place to place unobserved—it is often easier to prevent than to cure, and it is certainly better for the plants, for when once attacked, even though we may succeed by taking timely measures in arresting the progress of the disease, the plants are never the same afterwards; it is a rare occurrence for a plant to be attacked, even in a mild form, without losing its bottom leaves. The best way to deal with it is to pick off some of the worst leaves, for nothing can save them. Mulch the plant heavily with manure, and water sufficiently to moisten the soil; then syringe them with Gishurst compound, four ounces to the gallon. The whole of the leaves should be thoroughly wetted with the solution on both sides, and the syringing must be repeated until the fungus has been destroyed. It is never wise in dealing with known enemies to wait for them to begin the attack. Insects of all kinds, as aphides, red spider, thrips, &c., may be easily discomfited by taking the necessary measures beforehand. The first thing is generous treatment, and the next is, in anticipation of unfriendly visitors, to syringe with a weak solution of some insecticide. Soapsuds in which a little sulphur has been mixed are as good as anything. A very weak solution will have a cleansing effect upon the foliage of the plants, and the odor of soap is distasteful to insects. The floating spores of mildew do not take kindly to the surface of plants where the least trace of sulphur, soot, or lime is perceptible. Seedlings are more vigorous than plants raised from cuttings. In the days when we had no hollyhock fungus we raised our hollyhock seedlings in the open air, sowing the seeds about midsummer, pricking out in a nursery bed, where they remained all the winter. Now they are commonly raised in heat, often late in autumn or winter, and hurried on by forcing temperature, and it is not unlikely that this treatment has something to do with the predisposition to disease so common among hollyhocks now.

—H. in London Garden.



ALL SIZES OF SINGLE AND DOUBLE THICK

GLASS FOR GREENHOUSES.

ALL GLAZIERS' SUPPLIES.

Write for Latest Prices.



## FOR THE TRADE. FLORAL WIRE DESIGNS.

JAS. GRIFFITH,

THE PIONEER MANUFACTURER IN THE WEST,  
305 Main Street, CINCINNATI, OHIO.

SEND FOR WHOLESALE PRICE LIST.



## Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

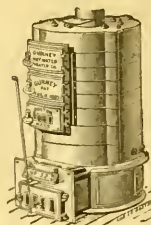
### GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

Mention American Florist.

L. Wolff Mfg. Co., 93 to 111 W. Lake St. CHICAGO

## GURNEY'S NEW HOT WATER HEATER.



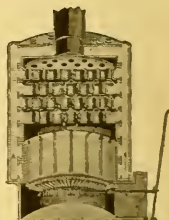
THE CHEAPEST AND BEST FOR  
GREENHOUSES AND CONSERVATORIES.

THE GURNEY HEATERS present more water surface to the direct action of the fire than any others known to us in use. They are the easiest to keep clean, and with due attention almost any kind of fuel may be used.

EASILY REGULATED.

SIMPLE AND EFFICIENT.  
SAFE AND ECONOMICAL.

MANUFACTURED BY THE  
GURNEY HOT WATER HEATER CO.,  
237 FRANKLIN STREET, BOSTON, MASS.



JOHN A. FISH, Managing Director.  
SEND FOR PAMPHLET AND PRICE LIST.

SELLING AGENTS.—M. H. Johnson, 140 Center Street, New York. Rice & Whitacre Manfg. Co., 42 and 44 W. Monroe Street, Chicago (West and Southwest). T. R. Chase, 31 Edmund Place, Detroit, Mich. (for Michigan and Ohio). Wm. Gardner & Co., Portland, Oregon.

## SASH BARS MADE OF CLEAR CYPRESS LUMBER.

Equal to Red Cedar in durability. Plain Bars  $1\frac{1}{2} \times 1\frac{1}{2}$  inches kept in stock. Price 2 cents per lineal foot. F. O. B.

Lockland Lumber Company, Lockland, Hamilton County Ohio.

## BLACK HAMBURGH GRAPES. "GRAPE DUST" AND MILDEW.

BENJAMIN HAMMOND, ESQ., Esteemed Friend:—Enclosed please find check for Grape Dust, etc. I have delayed remitting for this bill and I could report on the efficiency of the preparation. Three vines in my crapery—Black Hamburgs—were seriously attacked with mildew, on both leaves and fruit. Three applications of the Grape Dust entirely removed it, and the crop has ripened perfectly. The formula for its preparation, which you kindly sent me, shows it to be non-poisonous and entirely safe for use upon fruit to be eaten. Yours, very truly, JAMES WOOD.

For sample, send stamps to HAMMOND'S SEED WORKS, Fishkill-on-Hudson, N. Y.  
SOLD BY THE SEEDSMEN OF AMERICA.

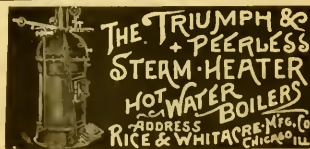
## Ives' Putty Machine.

Patented Jan. 8, 1887.

The best device ever invented for laying putty. With this you can make old leaky sash perfectly tight without removing the glass. It will do the work of five men in bedding glass.

Sent by Express on receipt of price, \$3.00.

J. H. IVES, DANBURY, CONN.

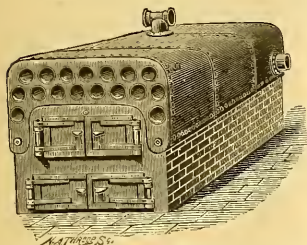


ESTABLISHED 1854.

**Devine's Boiler Works**

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers.



Capacity from 350 to 10,000 feet of four-inch pipe.  
Send for New List.

**PETER DEVINE,**

387 S. CANAL ST.,

CHICAGO.

ESTABLISHED, 1866.

Floral Wire Designs,

Manufactured by

**N. STEFFENS,**

335 East 21st Street. - NEW YORK.

**Conservatories**

GREENHOUSES, ETC.

Erected in any part of the U. S. or Canada  
glazed on the

Helliwell Pat. Imperishable System

OR WITH PUTTY.

For further testimonials, illustrated catalogue or  
estimates address**JOSEPHUS PLENTY.**

HOPTICULTURAL AND SKYLIGHT WORKS.

Offices, 144 Pearl Street, NEW YORK.

**TOBACCO STEMS FOR FLORISTS,**

ADDRESS

FOR SALE, packed in  
bales 300 to 250 lbs.NO CHARGE for deliver-  
ing to depots.

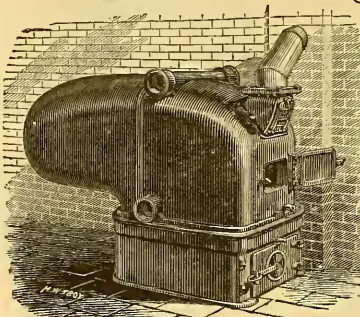
PRICE:

From \$8 to \$10 per ton,  
according to quanti-  
ties.**P. C. FULWEILER,**

716 Arch Street, PHILADELPHIA, PA.



**Wm. Radam's Patent Process for**  
Preserving Perishable Goods is the most  
perfect process on earth. It kills the  
fungus, or germs in the articles treated,  
and fermentation is stopped. Any  
quantity up to a car load can be treated  
at one time. Patented September 28,  
1884. Send for circulars to  
Wm. Radam,  
Austin, Tex.

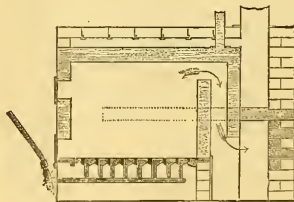
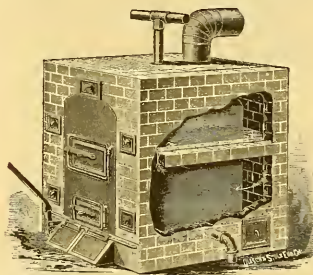
**Greenhouse Heating AND Ventilating****HITCHINGS & CO.**

233 Mercer Street, New York.

Five Patterns of Boilers,  
Eighteen Sizes,  
Corrugated Fire Box Boilers  
Saddle Boilers,  
Conical Boilers,  
Base Burning Water Heaters

Perfect Sash Raising Apparatus.

Send 4 cents postage for Illustrated Catalogue.

**GREENHOUSE HEATING APPARATUS.**

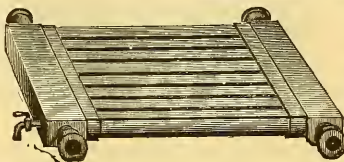
THE "ECONOMIC"

WROUGHT-IRON WELDED BOILER FOR HOT-WATER HEATING.

— SUITABLE FOR ANY KIND OF FUEL. —

THE ECLIPSE MANUFACTURING CO.,

125 South Clinton Street, CHICAGO, ILL.

**DICK'S HOT WATER GRATES**

Are more economical in fuel and will last **THREE**  
**TIMES** as long as the solid grates; they can be  
used in connection with Hot Air Flues. Send for  
circular of

TUBULAR SADDLE BOILERS AND GRATES'

TO **JOHN DICK, JR.,**

273 South 11th St., Philadelphia, Pa.

**THE AMERICAN FLORIST COMPANY'S****· : DIRECTORY : ·**

OF

**FLORISTS, NURSERYMEN AND SEEDSMEN**

OF THE

**UNITED STATES AND CANADA.**

1887.

**PRICE ONE DOLLAR.**

The most complete and accurate list yet published. The key designates the particular branch of the  
trade each one is engaged in. The street and number of those living in cities will insure the  
delivery of tons of catalogues which have hitherto remained dead in the office to which  
they were addressed. At this low price every one in the trade can afford  
to have a copy for reference. Address

**AMERICAN FLORIST Co.**

54 LA SALLE ST., CHICAGO.



## Index to Advertisers.

Advertising Rates, etc.	91
Allen, W. S.	91
Am. Florist Co.	94, 95, 101
Bayersdorfer, M. M. & Co.	98
Benz, Albert	99
Berger, H. H. & Co.	97
Bianco, A.	99
Blackenridge & Co.	10
Brague, L. B.	99
Brenneman & Pette-son	97
Carndy, J. D.	93
Cook, J.	93
Deakin, Robt. T. & Co.	93
Devine, Peter	101
Dick, John Jr.	101
Diez, John L. & Co.	98
Dillon, J. L.	91
Dreer, H. A.	93
Eclipse Mfg. Co.	101
Elliott, B. A. Co.	89, 98
Ellwanger & Barry	96
Evans, Chas. F.	96
Exeter Mach. Wks.	102
Fassett, F. E. & Bro.	99
Fink & Co.	99
Fulwiler, P. C.	101
Gallagher, M. F.	99
Gasser, J. M.	102
Germond, W. C.	99
Giddings, A.	99
Gilchrist, A.	99
Gilman, M.	99
Guthrie, Jas.	100
Growth, Henry J.	93
Gurney Heater Co.	100
Hales, H. W.	93
Hall, E. & Son.	95
Hallcock & Thorpe.	95
Hammond & Hunter	94
Hammond's Slug Shot	100
Harold, Thos. G.	99
Herr, Albert M.	99
Higley, Henry G.	99
Hill & Co.	99
Hippard, E.	99
Hilchings & Co.	101
Hoker, H. M.	100
Hulsebosch Bros.	95
Ives, J. H.	100
Jewett, Z. K.	96
Junkin & Coninck, A. M. Co.	94
Joosten, C. H. & Co.	95
King, James.	95
Krick, W. C.	95
Krieheng, Oscar H.	99
Lamb, Jas. M.	99

Lamborn, Lora L.	99
Lockland Lumber Co.	100
McAllister, F. E.	95
McFarland, J. Horace	91
Maitre & Cook	95
Mann, H. & Son.	96
Matthews, Wm.	99
Michel Plant & Seed Co.	95
Miller, Geo. W.	95
Monon Route	102
Murdock, A. M. & J. E.	91
Myers & Co.	102
Natz & Neuner	102
Pennock, Chas. E.	91
Perkins, John A.	91
Perkins, J. N.	103
Plenty Josephus	101
Price, Charles S.	98
Quaker City Machine Works	93
Radam, Wm.	101
Reed & Keller	101
Rice & Whitacre Mfg. Co.	100
Roiker, Aug. & Sons	95
Ross & Millam	95
Saul, John	102
Schultheis Bros.	89
Schulz, Jacob	99
Scollay, John A.	102
Sheppard, E. & Sons	95
Schleire, W. R.	99
Sheridan, W. F.	91
Siebrecht & Wadley	99
Simmons, W. P. & Co.	95
Situations, Wants etc.	89
Smith, Wm. H.	95
Snodder, Wm. H.	95
Steffens, N.	101
Stewart, Wm.	91
Stranes, C. & Co.	91
Taplin, S.	97
Ude, J. W.	102
U. S. Waterproofing Fibre Co.	93
Van der Schoot, K. & Son	95
Vaughan, J. C.	91, 95
Ware, F. C.	91
Weathered, Thos. W.	102
Welch Bros.	91
Wills, J. & Co.	95
Wilks, S. Mfg. Co.	102
Wilson, Wm. C.	95
Wittebe, G. J.	99
Wolf, L. Mfg. Co.	100
Wood, F. C. & Bro.	95
Young, Thos. Jr. & Co.	91
Zirngiebel, D.	99

CAN GRAPES be grown under ground glass? If any reader of the FLORIST has tried it, will he please relate his experience?  
G. G.

WASHINGTON.—Henry Pfister, head gardener at the White House, is away on a two weeks' vacation. Cora E. Ker-shaw, a new florist at Anacostia, is building a new house 21 x 80.

## ORCHIDS RARE PLANTS, & C.

A very large stock of choice East Indian Orchids, viz.: Phalaenopsis, Renanthera, Saccolabium, Epidendrum, Cypripedium, Dendrobium, etc. Also Central and South American Orchids, as Cattleyas, Lailias, Lycastes, Oncidium, Odontoclossums, well-grown plants, and at as low rates as it is possible to offer these fine sorts.

### NEW AND RARE PLANTS,

A large collection of Hothouse and Greenhouse plants, which are carefully grown, and offered at low rates.

### DUTCH BULBS,

Large importations direct from the leading growers in Holland; first quality bulbs. Catalogues on application.

JOHN SAUL, WASHINGTON, D. C.

—FOR—

## PAMPAS :- PLUMES

ADDRESS THE GROWER,

J. W. UDE, Santa Barbara, Cal.,

—OR—

A. VIRGIEN, P. O. Box 3119, New York City.

Delegates to the next convention will travel via the Pullman Car Line



TO AND FROM Louisville, Indianapolis, Cincinnati and the winter resorts of Florida and the South. For full information address

E. O. McCormick, Gen. Passenger Agt., Chicago.

## IMPROVED BOILERS

FOR HEATING

# GREENHOUSES

GRAPERIES, POULTRY-HOUSES, ETC.  
ALSO FOR HEATING

WITH HOT WATER UNDER PRESSURE.  
VENTILATING APPARATUS

For Raising Sashes in Greenhouses.

### GALVANIZED SCREW EYES

And Wire for Trellis Work.  
Send for Catalogue.

Thos. W. Weathered,  
46 & 48 MARION ST., N. Y.

Sectional View.

Mention American Florist.

## HEATING APPARATUS

FOR

# Greenhouses, Etc.

CAST IRON PIPE AND FITTINGS.

JOHN A. SCOLLAY,  
74 & 76 Myrtle Ave., Brooklyn, N. Y.

## Improved Hot Water Boilers

For Heating

# Greenhouses, Graperies, CONSERVATORIES, ETC.

ALSO

Cast Iron Pipe, Fittings, Valves and all Material for Heating by Hot Water.

Send for Catalogue.

## MYERS & CO.

1173 So. 9th St.,  
PHILADELPHIA.

# GREENHOUSE HEATING

BY STEAM, BY HOT WATER, BY COMBINATION STEAM AND WATER.

## EXETER MACHINE WORKS,

19 FEDERAL ST., BOSTON, MASS. WORKS—EXETER, N. H.

### THE CELEBRATED WILKS WATER HEATER!

For Heating

GREENHOUSES, DWELLINGS, POULTRY HOUSES, STORES, BATH TUBS, ETC., ETC.

Send for Price List.

S. Wilks Mfg. Co.,  
Cor. Monroe & Clinton Sts., Chicago

### J. M. GASSER'S PAT. ZINC JOINTS

For Butting Glass without Laps.

Makes it air and water tight. No breakage from frost. Saves fuel and glass.

FLORIST'S WATCHMAN, for Flues and Hot Water, \$10.00 for Steam, \$5.00. It will ring a bell when the temperature changes, and ring when the steam goes down.

J. M. GASSER.  
71 Euclid Avenue, CLEVELAND, OHIO,  
Mention American Florist.

# THE AMERICAN FLORIST



America is "the Prow of the Vessel; there may be more comfort in the first to touch Unknown Seas."

Vol. III.

CHICAGO AND NEW YORK, OCTOBER 15, 1887.

No. 53.

## THE AMERICAN FLORIST

Copyright, 1887, by American Florist Company  
Entered as Second-class Mail matter.  
Published on the 1st and 15th of each month by

THE AMERICAN FLORIST COMPANY.  
GENERAL OFFICES, 54 La Salle Street, Chicago.  
EASTERN OFFICE,  
Room 81, Vanderbilt Building, New York.

All communications should be addressed to the  
general office at Chicago.

SOCIETY OF AMERICAN FLORISTS.—E. G. Hill,  
Richmond, Ind., president; John N. May, Sum-  
mit, N. J., vice-president; M. A. Hunt, Terre  
Haute, Ind., treasurer; Wm. J. Stewart, 67 Brom-  
field street, Boston, Mass., secretary. The fourth  
annual meeting at New York, Aug. 17, 18, 19,  
1888.

THE EXECUTIVE COMMITTEE of the S.  
A. F. for the present term has been ap-  
pointed, and is composed of the following  
gentlemen:

Peter Henderson, New York City.  
A. F. Calder, Boston, Mass.  
Chas. D. Ball, Honesburg, Pa.  
F. R. Pierson, Tarrytown, N. Y.  
Henry Michel, St. Louis, Mo.  
J. M. Keller, Bay Ridge, N. Y.  
A. E. Whittle, Albany, N. Y.  
J. D. Reynolds, Riverside, Ill.  
Wm. G. Bertermann, Indianapolis, Ind.

President Hill says: "It was with hesi-  
tancy that a new lot of men were put in,  
but the opinion seemed to be prevalent  
that it would be wise to have new blood,  
and to disarm all criticism to the effect  
that 'a clique is running the society.'  
Robert Craig is a member of the com-  
mittee by virtue of his office. We are  
promised the cordial support of all the  
old members."

[The new list is an excellent one, and  
we see no cause for complaint concern-  
ing the new names, further than com-  
ments might be made on the large east-  
ern representation, four being from New  
York alone. Indiana, however, seems  
now a safe state, having a member, as  
well as both president and treasurer.  
We suppose the constitution and by-laws  
of the society will be so amended as to  
make them conform to this general  
change of the executive committee.—  
Ed.]

### Correction.

In the account of the annual exhibi-  
tion of the Mass. Hort. society, on page  
80 of the FLORIST, there were two errors  
which I desire to correct. For C. M.  
Atkinson, gardener to C. S. Sargent, read  
C. M. Atkinson, gardener to John L.  
Gardner. This error was simply due to  
my own carelessness.

The other error was in regard to a  
plant, *Heliconia aureo striata*, which I  
stated was then exhibited here for the  
first time. A plant of this variety was  
shown here two months ago by Geo. Mc-  
Williams, gardener to J. Lasell, Whitins-  
ville, Mass., and was awarded a silver  
medal.

W. J. STEWART.

## Horticultural Exhibitions.

BY CHARLES D. BALL.

*Read before the Philadelphia Florist Club, October,  
1887.*

The subject for this evening's essay,  
viz., "How should Horticultural Exhibi-  
tions be conducted so as to be both a  
financial and artistic success," appeared  
to me at first much easier to demonstrate  
than I afterward found it to be. We  
often imagine we see errors made which  
at the time could have been prevented.  
It is human nature to suppose that we  
could do better than some other person,  
and we are always ready to suggest what  
we think would have been better. Yet  
the difficulty is to prove by stating intel-  
ligently what those errors are, and what  
improvement could be made to render  
that which has so often been a failure, a  
success. Without much thought on the  
matter, we are apt to suppose that a good  
premium list and a full hall of fairly  
good specimens of plants and flowers  
constitute a successful exhibition. Too  
often a feeling akin to selfishness pre-  
dominates among those most interested  
in exhibitions of this kind. If the dis-  
play pleases them—if they think there  
are the proper number of perfectly trained  
and grown plants in the room, or that  
the designs of flowers are skillfully man-  
ufactured—the exhibition is pronounced a  
success, in one way at least; and if after-  
ward it is proven that we have been mis-  
taken, and that it has not been in the  
other way—viz., financially—we wonder  
why so fine an exhibition failed to attract  
the public and, what is of more account,  
the public's 50-cent pieces. Exhibitions  
of this kind for some years past (with a  
few exceptions) have not been successful,  
either financially to the society giving  
them or to the exhibitors. Society peo-  
ple and the public generally do not seem  
to appreciate or take that same interest  
in exhibitions of plants and flowers that  
they formerly did. It seems now almost  
impossible to attract a sufficient number  
of paying visitors to meet the expenses.  
It is not because the public is less inter-  
ested in flowers; our increased sales, the  
enormous growth of our business during  
the past ten or fifteen years, prove the  
contrary. Our exhibitions have not  
grown in interest in proportion to the  
growth of our business, however. This  
should be the case, yet unfortunately the  
contrary seems to be a proven fact.  
Something is wanting. Exhibitions do  
not receive the patronage they deserve  
by the wealthy classes. The public need  
and demand something which we do not  
give them; what this something is to  
the interest of the florist and societies  
under whose auspices exhibitions are  
given to find out. Our exhibition system  
needs a thorough overhauling, and too  
much thought and attention cannot be  
given this subject.

Artistically, they have seldom been a  
success. The arrangement of the differ-  
ent collections in the room, so as to pro-  
duce the best effect, should be well con-  
sidered always. Each exhibitor should  
study how to arrange his collection so  
the general effect will be striking to the  
eye. I have often wondered why we,  
whose whole business is in those things  
which are used only to decorate and  
beautify, should so often forget to ar-  
range and make attractive our exhibits.  
A collection of say twelve or twenty-five  
large plants could surely be arranged  
more artistically than is usually done.  
We generally see them placed on high  
and bare tables, the pots uncovered and  
the most prominent feature, often even  
unwashed. Would it not look much bet-  
ter, if the plants are large and tall, to  
place them on or near the floor, so that  
we might get a view of the plants them-  
selves instead of the pot, without strain-  
ing our necks? We all know how much  
better the effect is when looking down  
rather than up at a collection of plants.  
Smaller plants could be used for border-  
ing and filling up the bare spaces be-  
tween the pots with good effect, thus  
transforming what was a dozen or more  
lone plants into a beautiful group of foli-  
age or flowers, or both. Yet the rules of  
most exhibition governments prevent any  
other plants than those for competition  
being used to fill in. The reason given,  
I believe, is that the judges might get  
confused and not be able to select from  
the group the plants to be examined by  
them. This trouble, I think, could be  
easily gotten over. The plants for com-  
petition could be, and should be, under  
all circumstances distinctly marked by  
labels giving the name of the plant and  
specifying the class they are entered for.  
These labels should be so placed that  
they could be distinctly seen and read by  
every one. This style of label would  
greatly assist the judges in their duties,  
and would effectually prevent any mis-  
take that might occur on account of  
other plants being used for effect. No  
one of our respectable city florists, in  
decorating a house for a dinner, ball, or  
other entertainment, would dare to ar-  
range his plants as is usually done at ex-  
hibitions; he would study effect and at-  
tempt to make something pleasing to the  
eye. People who are accustomed to see-  
ing plants so arranged, expect something  
even better at an exhibition. They can-  
not always appreciate what a florist  
would; they want something more. A  
connoisseur may see the beauty in a  
picture even without a frame, yet the  
majority will think it needs the frame to  
adorn and make it complete.

I think it would be an excellent idea  
to offer special premiums for collections  
of plants or plants and flowers arranged  
for effect only. It is commonly done in  
Europe; why should it not be done here?



Corners, corridors and other places in an exhibition building that are now often left bare could be utilized with grand effect. I am certain the public would be pleased with such displays. They want variety and plenty to look at. Many florists may not have large specimens or many varieties of plants, but perhaps might show something well worth looking at if there were awards offered for skill in arranging. In Philadelphia we have a large main hall, a lower hall, and the foyer. In my opinion we should try at our main shows to have the whole building filled with plants, flowers, etc. Every florist should remember that he is personally interested in having exhibitions attractive and well patronized; the more the people are interested, the more he will sell. All growers and city florists should endeavor to contribute something.

To increase the attendance at shows of this kind, it seems necessary that they should be fashionable. If we can get society people to think it is the thing to attend such affairs, a large attendance can be reckoned upon. Society leaders are the first ones to get a hold upon; where a few leaders go, the flock will follow after. Some years ago this was the case in Philadelphia; they were fashionable and well attended. To resurrect this pleasing state of affairs, I would propose that endeavors be made to interest some ladies high in social standing, and that they be requested to use their influence toward making our exhibitions popular. Get the ladies to come, and we can rest assured that plenty of gentlemen will follow after. Another thing I think important enough not to overlook is the music; good music and plenty of it should always be provided. The class of people that love flowers usually love good music; the two go well together.

To make exhibitions successful, the exhibitors should interest the people, and the society giving the exhibition should interest the exhibitor. Failure to draw exhibitors often comes from failure of the society to do the exhibitor justice. There is little honor in a premium. The society should not think its duty done when the premium is awarded, but should take special pains to do public honor to its successful exhibitors. A premium should not be the *all* an exhibitor is to receive. Premiums as awards should not be so much thought of, and are not by the best class of exhibitors. In getting up exhibitions, it is usually thought that all that is necessary is to get out a splendid premium list. Exhibitors want more than mere premiums; they want appreciation and discriminative awards made by those in whose superior judgment we can have confidence. If we have something superior, and know that the exhibition will take the trouble to publish the fact for us, we will exhibit, and the people will come to see it and be willing to pay to see this superior something. Reporters competent should give a detailed description of meritorious exhibits. This reporting should be done by and at the cost of the society; let them honor their exhibitors by an advertisement of their excellence. Of course, I do not mean to undervalue the importance of a good premium list. Good premiums—the larger the better—should be offered; yet good judgment should be used in preparing this list. It appears to me that it is often a mistake to offer third and fourth premiums on collections of plants, especially where it is necessary to economize. I rather think that better results would follow if these amounts were added to the first and second premiums. I have

seen awards given for stuff unworthy of notice, merely because there was no further competition, there being only three or four collections under the same class. The offer of a certain sum of money divided into a few large premiums will draw more and a far better class of exhibits than the same money offered in many small premiums.

Certificates of merit are also useful and valuable, and when deserving should be more freely used in addition to awards of money. They cost little, and worthy exhibits are entitled to something more lasting than the very small amount of money usually paid in a premium. Besides they could often be used instead of special premiums of money. When a new plant or a collection not mentioned in the list is shown and is worthy of mention, it is customary to award a special premium. A certificate in such case is really all that should be given. I also



GROUND PLAN OF SUN DIAL.

think it wrong to give as is sometimes done, a special premium of money for a collection that has either already taken a premium or has been entered in competition for some premium and failed to get it. A certificate in this case might be given if the case deserved it. The size of plants or designs should not be cause for awarding premiums. The most healthy, well grown stuff should always be given preference; also the most skillfully arranged design irrespective of size or even quality of blooms should be given first choice. I contend that for cut flower designs the awards are offered for skillful workmanship, the quality of the flowers or the size of the piece have nothing to do with it—excepting when no superiority of workmanship can be observed, then other things should be considered—but the work first, always. I will cite an incident relating to this, that I read in one of the London papers (the *Gardener's Chronicle* I think). Two designs of flowers were placed in competition. One was made of the choicest varieties of flowers, causing considerable expense to the exhibitor; the other was made chiefly of wild flowers, costing little or nothing, and individually possessing little beauty. The judges in making their award saw so much superior skill displayed in the arrangement of the latter that they awarded the premium to the wild flowers. An appeal was made on the decision, but not sustained, they justly claiming that the award was offered for skill rather than

for the quality of the flowers or the value of the design.

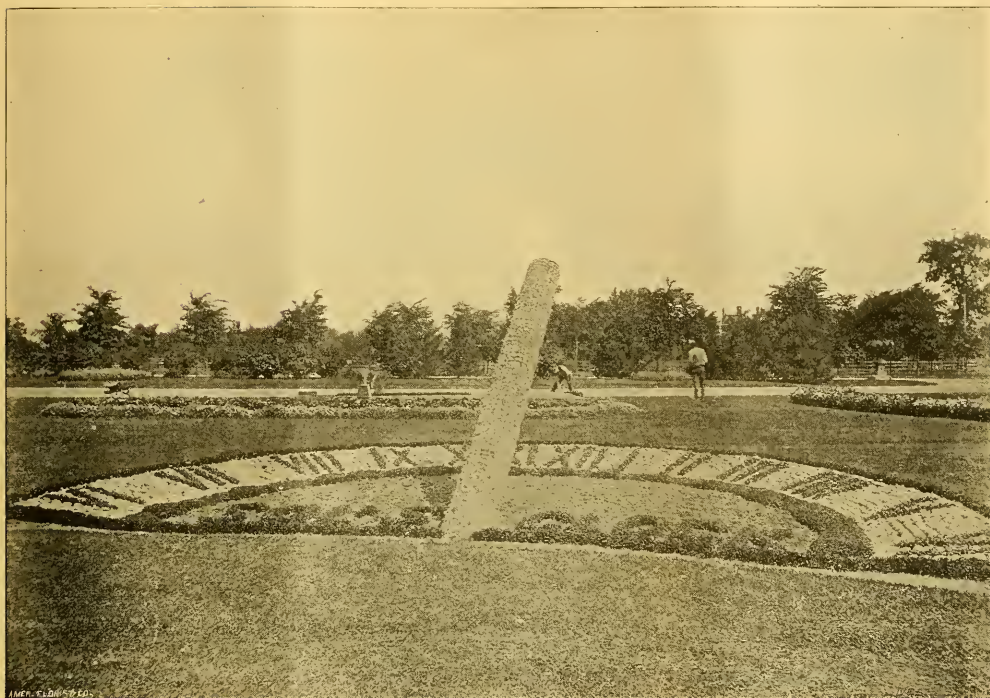
Great care should be taken in selecting competent and disinterested judges. There is sure to be some "swearing" at the decision of the judges; the disappointed ones will feel affronted—yet when there is cause for their dissatisfaction through ignorance or favoritism of the judges, the injury done the exhibitors is great. Such mistakes can seldom be rectified—often such injured exhibitors will never take any active part again; denouncing the exhibition to their customers, thereby doing them permanent injury.

I think it essential that the management enforce all rules relating to entries, staging, &c. There is usually a rule requiring that all applications for space shall be made a certain number of days before the exhibitions opens; also one requiring that exhibits shall be staged at a certain hour before the opening. This latter especially is important as regards designs of cut flowers. Judges should never view any design until it is completed, and the exhibitor has hidden himself behind some near column or in some corner; they should never know whose work they are viewing. The former rule should be enforced in all cases so that the committee in charge may know in time what to provide for, and assign space to each applicant so that the arrangement of the rooms will be most effective.

In conclusion I would again call your attention to the many advantages a successful exhibition presents to the florist—as a means of advertising; as a means of presenting any new or rare plant or workmanship to the public, as well as that of exciting an interest in flowers and plants in the people, on whom we are directly dependent for the consumption of our products.

Pennsylvania Hort. Society Exhibition,  
Sept. 27, 28 and 29.

I was very fortunate to spend an hour or two at this very excellent show. There was so much to admire and nothing to condemn. It does not happen very often to see nothing to find fault with, but such was the case in this instance. I cannot give a list of exhibitors, but will say that whoever grew the following plants are cultivators. Of palms there were magnificent specimens; *Chamaerops* *Fortunii*, most exquisite; *Latania* *Bourbonica*, perfectly grand; two *Thrinax* *elegans* nine feet high, *Kentias* *Forsteriana* and *Balmorea*, *Cocos* *Weddelliana*, *Licuala* *grandis*, and a gem of *Pheniceophorum* *Sechellarum*. Of cycads there were *circularis*, *revoluta* and *Armstrongii*, besides *zamia*, *encephalartos* and *dions*. A group of ferns were finely staged and in the best possible condition; not tiny bits, but fine specimens. Those which struck me as being particularly noteworthy were of the maiden hairs—*coneanatum* *grandiceps*, *dolabriforme*, *tetraphyllum*, *aneitense*, *trapeziforme*, *peruviana* and *Wilesianum*; three of the most perfect *gleichenias*; *Davallia* *Pijiensis*, *cyathaeas* and *chiotiums*. A group of *caladiums* over three feet in diameter lent a fine piece of coloring, while several smaller collections would have been a credit to any exhibition. There were some *marantas* shown in such condition as to be difficult to surpass, and in awarding the premiums it was very difficult to pick out the first, second and third; then the *crotons* were nearly as closely connected, and again a difficulty arose who should be first.



THE SUN DIAL, SOUTH PARK, CHICAGO.

Several exhibits not for competition showed that everybody in Philadelphia were not after the firsts, and I may remark that as long as exhibitors are willing to show without an inducement to obtain money prizes, no exhibition will fail. It does one's heart good to know that there are such men to be found. A most brilliant collection of tuberous rooted begonias proved how valuable they are for colored effect in autumn exhibitions.

The cut flowers and designs were not quite as numerous as usually seen, but then they possessed quality, so that made up for the lack of number. The Puritan and Mrs. John Laing roses were in fine condition. The former possesses a character entirely its own, and if I am not mistaken in the latter, it will prove more than A. I. I was particularly smitten with its elegant shell-like petals and its delicate flesh pink color under artificial light, and pronounce it just elegant. There is much more to be told, but for lack of time at the exhibition I could not take more notes. JOHN THORPE.

#### Coming Chrysanthemum Shows.

Philadelphia—November 8-12.  
Boston—November 9-11.  
Chicago—November 8-10.  
New York—November 8-10.  
Orange, N. J.—November 2-4.  
Indianapolis—November 8-11.  
Baltimore—November 2-4.

#### OBITUARY.

JOSEPH E. MITCHELL.—Joseph Eastburn Mitchell, president of the Pennsylvania Hort. society, died at his home in Philadelphia on the 5th inst. He had not been in good health for several years. The deceased had been a member of the society for forty years, and from an early period in life had taken an active interest in horticultural and pomological subjects. In 1884 Mr. Mitchell was elected president of the society to succeed the late Wm. L. Schaeffer. He also served in that capacity in 1862-'63, and in 1864-'65. He was also a trustee of the Horticultural hall. The deceased became a member of the Franklin institute in 1838, but resigned about four years after. In 1867 he again became a member, and in 1871 was made one of its managers. In 1876 he was elected a vice-president of the institution. He served upon several committees, including the committee on exhibitions. Mr. Mitchell made three trips to Europe, one of which was made in 1873, when he visited the Vienna exposition as president of the commission from Philadelphia to inquire into the organization and conduct of the exhibition. On his return he published an interesting report. The deceased leaves a widow, two sons and a daughter.

The funeral which occurred October 8 was largely attended. The society will feel keenly the loss of another of its old and influential members.

#### Chicago Parks.

Our view in this issue shows the sun dial which has been a feature of South Park for two seasons—slightly changed for this year. The lettering, "Sol's Clock," is of *Alternanthera aurea nana* on a field of *Sedum* acre; the figures are of *Alter. paronychioides major*, and the outside border of *Alter. amena*, the figures resting on a background of *Echeveria secunda glauca*. The wide border which separates the figures from the center field is of *Oxalis tropaeoloides* interspersed with triangles of *Alter. aurea nana*; the center field itself is solid *Sedum* acre; the whole affair being twenty-eight feet in diameter. The style is about ten inches in diameter, and is a timber wound with moss and earth, and then planted with the *echeveria*, as shown. As will be seen by a glance at the view, the photograph was taken at 9:30 A. M. All the views of this series were photographed under the personal supervision of a representative of the FLORIST, and the plates are engraved direct from the photographs so secured. We give on opposite page a sketch of the working plan; the lower sketch shows the incline at which the style is set.

NYPHÆA PYGMEÆ is the little white-flowering Chinese species. At the Arnold Arboretum Jackson Dawson has it in bloom in a tub of water in the propagating house, and, he tells me, from seed sown last spring.





## Cultural Notes.

Now don't forget to pinch off every deformed flower, as every one can be seen at this time. The very dark varieties will be better for being shaded in bright sunshine. It is a mistake to think that dark chrysanthemums want bright sunshine to bring out the colors; on the contrary, they bleach out.

Don't let a plant flag or wilt for the want of water, if you want the finest flowers. See that plants for exhibition are tied before the flowers expand, as afterwards it cannot be done without bruising.

If some of the very early flowers are wanted for exhibition, cut them as soon as they are fully open and place them in a cool cellar where they can get a little light; cut them on long stems, and every two or three days shorten the stem an inch or two and give them fresh water. I have kept flowers for a month in this way, which were even better than when cut.

I understand there is quite a novelty from Japan which flowered last year. It is a rich amaranth, distinctly spotted and dotted with pure white. It is to be called "Leopard." Of American seedlings this year, the census taken at Boston, Philadelphia and Orange foots up to over 3,000, so we can hope for some genuine novelties. JOHN THORPE.

## Satin Star of Bethlehem.

(*Ornithogalum Nidans*.)

One of the most useful bulbs for furnishing cut flowers in the early part of the year, and beautiful as a garden plant, but it must be planted cautiously, as in some soils it increases so fast by seeds and offsets as to become a pest. When cut, the flowers become even more satini-like, and open more fully than they do on the plant; also the whole of the flowers remain open together; whereas in a growing state the lower flowers run rapidly to seed.—J., in *London Garden*.

## Odds and Ends.

Your correspondent, "V.", (p. 42) will find that there is little art in growing *L. candidum*, particularly if he procures good bulbs to start with. They should be potted about middle of August, in 5 or 6-inch pots, and plunged outdoors until the pots are well filled with bloom, when they can be removed to a cool corner indoors. As soon as flower stems begin to show, give abundantly of liquid manure; as flowers are required remove to a temperature of 60° to 70° Fahr.; they will bloom in from six to eight weeks. I never mix manure with the soil when potting, as I prefer to apply it later in liquid form. The essential points briefly are: Get good strong bulbs; root them in the lowest possible temperature; do not let them suffer from drought, but avoid over-watering. I never dry my bulbs entirely off, and I should add that succession plantings may be made up to January, if desired.

There is no better remedy for mildew than sulphur, but it is always an eyesore

to me to see it dusted over the foliage of a rose house; neither do I appreciate the method advocated by some, of burning it in the house; painted over the hot-water pipes I consider by far the best method; but at this season, when we have no fires and the best of us liable to get a touch of mildew, my plan is to sprinkle sulphur over the beds on a bright warm day, shutting the house up close, and avoiding all moisture for that day. This treatment is generally effective, and a slight scratching over of the beds next morning will obliterate all traces of the sulphur.

It is sometimes my fate, especially at this season of the year, to drop across a florist engaged in patching up a house that has long ceased to be worth repair-



SATIN STAR OF BETHLEHEM

ing. Dullness of trade and the consequent necessity of rigid economy are the stereotyped excuses—and of a truth it is incumbent on the florist to practice economy in every legitimate way; but is it economy to waste time and money on an old greenhouse? I think a very little figuring will prove to all who are inclined to indulge in such pastime, that the money thus wasted would soon suffice to build an entire new house; and viewed from a business standpoint, to be limited to a single greenhouse, neat, orderly and substantial in its appointments, is vastly preferable to being the possessor of a dozen patched-up and dilapidated-looking structures, in which good stock can never be grown, and useful only as a medium for driving away trade. Whenever I am unfortunate enough to stumble across such an establishment I am certain to hear that trade is poor, to find the stock worthless, and the proprietor, as to disposition and intelligence, in perfect harmony with his surroundings.

When the writer was in his horticultural baby-clothes, two points relative to carnation culture were impressed upon

him, viz., that carnations would not stand much heat or moisture. Subsequent experience has served to dispel this, and many other illusions. Carnations will bear considerable cold, but they will also stand much forcing, and in a temperature of 65° they will bloom well, but they must have abundance of water at the roots, and liberal syringing to keep down red spider. A little bone meal mixed with the soil when planting is very beneficial, but other manures should be avoided. After the plants have got well under way, however, give liquid manure twice a week.

There are men in the trade to-day who contend that the commercial grower cannot afford the time to grow specimen plants, while in reality to *take* time is a duty which every florist owes to himself. Last season R. J. Halliday had in his house specimen plants of everything, new and old, which he had for sale, and I can safely say that those specimens sold more plants for him than a volume of advertising would have done. I don't disparage the use of printer's ink; on the contrary, the more of it the florist can afford to use, the better for himself; but when a customer buys a plant on the strength of an advertisement, and meets with any failure, he is very liable to attribute some deception to the florist; but when this customer buys after seeing a good specimen of the plant, he is compelled to admit that the failure, if any, is due to no misrepresentation by the florist.

The annual exhibition of the Maryland Hort. society opened on Sept. 27, to continue four days. There was a gratifying increase in the number of exhibitors, and the various exhibits were of unusual excellence. Probably the most attractive feature of the exhibition was R. J. Halliday's display of bulbs, seeds, tools and florists' supplies. The most noticeable plants were a very fine specimen of *Crim* amabile in bloom from Gen. G. S. Brown's conservatories, a magnificent *Cycas revoluta* in fruit from Mr. Hoen's nurseries, and a splendid *Caryota Cunninghamii*, eighteen feet high, from T. H. Garrett's private collection, and presented by that gentleman after the exhibition to the Washington, D. C., Botanic gardens. The principal premiums in plants were awarded to Gen. Brown, Hamilton Easter, John Cook, R. J. Halliday, James Pentland and Ernest Hoen. Amongst the cut flowers were a lot of roses from John Cook excelling any shown here for a long time. I hope in a future issue to give some interesting notes concerning Mr. Cook's seedling roses, of which he has an entire house full.

Some growers make a sad mistake in over-potting their callas; not only do large pots take up a good deal of room, but they seriously interfere with the productiveness of the plants. A calla blooms best when pot-bound, for if it is given much room to grow, it will produce little except foliage; they must be grown in the smallest pots possible, and well fed, to produce plenty of flowers; if convenient to plant them out closely on benches of proper depth, the result will be better than if grown in pots.

Passing a florist store lately, I saw displayed in the window a mass of flowers purporting to be a floral rooster, and I could not help ruminating on the base uses to which the florist's art may be diverted. At one time or another I have seen those moral monstrosities—alleged representations of almost everything under the sun—but I could never admire



BEGONIA MANICATA AUREA.

them; they are neither artistic nor pleasing to the senses. Occasionally one of those burlesques is ordered by a customer, when of course the florist must do the best he can; but too frequently they are evolved from the fertile brain of some florist who prides himself on his originality. Originality is a gift, and the florist possessing it is bound to step up front—always, providing, however, that his originality of ideas be abundantly savored with good common sense. The simpler a piece of floral work, the more attractive it is, and the more remunerative to the florist, for, as a rule, the prices paid for ponderous designs do not compensate for the time and material consumed in their construction.

I have tried several methods of propagating alternantheras, but the plan which I have followed for the past two or three years pleases me best. I use boxes of convenient size and three or four inches in depth; a little rough soil is put in the bottom, and the boxes filled up with sand, watered and pressed firmly; the cuttings are inserted pretty thickly in the boxes, which are then placed on some convenient shelf or bench; except the necessary watering, they have no further attention till about March, when they are taken out of the boxes, the tops and roots cut back, and potted in 2½-inch pots. They make fine plants by the time they are required for bedding

purposes. If a few of the old plants are lifted before frost and planted under the benches in a warm corner, they will furnish through the winter a supply of bright-colored foliage, which I find extremely useful in some kinds of cut flower work.

Baltimore, Md.

A. W. M.

#### Smilax.

(*Myrsiphyllum Asparagoides*.)

Ever since smilax came into general use by those employed in the cut flower business, the demand for it has continued to increase, notwithstanding that several plants of considerable merit have been brought forward as competitors for at least an equal share of attention. Chief among these is *Lygodium scandens* and *Asparagus tenuissimus* and *plumosa*, all of which are excellent in their way, but none of them are adapted for every purpose for which smilax is so eminently fitted. It may seem unnecessary to say anything in regard to the cultivation of a plant so well known, but as there are always individuals fresh in the field requiring to be instructed in the simplest operations of horticulture, and as it is often to be seen grown in such a state as to be unremunerative, a few facts indicating how it can be made profitable might not be out of place here.

Instead of raising the plants from seed every year, some prefer to do so only once in several years, which method may prove satisfactory when grown in some soils, but we have invariably obtained the best results by sowing every season. This we do in January or February, in pans or shallow boxes in light soil. To facilitate germination, it is well to soak the seed in water for a day or two before sowing. When the plants are large enough to handle they are potted either singly or in pairs in 3-inch pots, there to remain until well rooted, when they are transferred to pots a size larger. In these they will grow into stocky plants without further attention than careful watering and topping such shoots as are inclined to run. Care also is necessary to stand them in an airy situation in the house, as when the weather is warm and muggy in June they are liable to suffer from damp.

In preparing the bed for their reception a moderate dressing of rotted manure should be dug into the ground, and when so finished a slight sprinkling of Mapes' A brand of phosphate sown over all and raked in. The plants are set out in lines eight or nine inches apart, and the same distance between the plants in the rows. For supporting strings we prefer six-cable black thread, as it is sufficiently strong, and almost invisible when the vines are cut. As the plants grow, some attention is necessary to guide the runners to their respective supports, not forgetting that it is a characteristic of this plant to almost invariably revolve with the sun; that is, by the spectator facing south, it turns from his left hand to his right. If forced in any other direction, the chances are it will refuse to go, untwine itself, and wander after some other object upon which to cling without unnatural restraints to impede its progress. After the plants have freely taken to run, little attention is needed beyond keeping the ground constantly moist, never saturated, and sprinkling overhead night and morning, unless during dull and rainy weather.

Plants so treated will be fit to cut in strings from six to eight feet in length by the end of September, provided they have sufficient head room, and will continue in good condition until February or March. For a second crop more reliance is to be placed upon a new plantations than the roots of those just cut; and if last season's roots have been well preserved, the best of them can be made to do good service by planting close to the roots of the present year's growth as they are cut.

A. VEITCH.

New Haven, Conn.

#### Begonia Manicata Aurea.

Among variegated plants, we have found none handsomer than this fine begonia. The plain green manicata is a very beautiful variety, clean and glossy and elegant, bearing the veil of pink bloom above it; but when we find manicata beautifully blotched with cream color, deepening into canary, and note the waxy, heavy substance of the leaves, and the fine contrast of the spreading panicle of lace like pink bloom, we feel that perfection has been attained. No other plant that we know, carries such bold markings, nor in so pleasing combination of colors. The wood cut is a true representation of this beautiful variety as grown the past year.

It originated with MM. Rogero & Son of Turin, Italy, and created great interest



when introduced into France, where the elegance of its form and its beautiful variegation were fully appreciated as far back as 1883 and '84. E. G. H.



#### Forcing Under Glass.

Continued care in attending promptly to all the little details of culture is just as necessary to ensure the best success with carnations as is the case with roses. Watering is one of the most important points. Be careful that the plants are not allowed to droop when first planted in the houses; if this happens you may make up your mind that the flowers of the first coming crop will not be as fine as would be the case did not this occur. Plant only first-class plants and stake *at once* after being planted, so that no shoots can lay upon the ground; if allowed to straggle on the surface of the bed for awhile it is then difficult to get them to grow up straight as they should do. Plant in perfectly straight lines so that when neatly staked you can readily water under and between the plants with the hose without wetting the foliage.

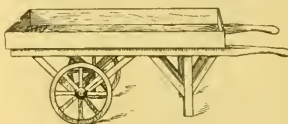
Of course no set rule can be given as to when and how much to water, but if your soil is of a close texture water rather too little than too much; if the soil is of an open nature you may be more liberal. A very successful Chicago grower who has eight large houses devoted to carnations does all the watering himself, and to this fact he attributes much of his success. When the carnations are first planted in the houses he waters heavily and then waters just enough to keep the ground moist until the plants are established; on the mornings of days which promise to be sunny he sprays the foliage, and in long stretches of dark weather finds it advisable to withhold water altogether for whole weeks at a time. The soil should always be moist, never wet. If in dark weather it is found that the soil is dry, water the bed so that it will be moistened clear through but be careful not to wet the foliage until a sunny day comes. A temperature of from 45° to 50° at night is the highest that should be kept. A little fire should be kept in the houses on cold nights now, even if you have to ventilate to keep the temperature down; the object is to keep that cold dampness out of the house. This point has been covered by Mr. May in regard to roses, and it is an equally valuable one with carnations. Don't neglect it if you want the best success.

Where carnations are carefully watered, the blooms can be kept on the plants in perfect condition for several weeks, which is a great advantage in being able to accumulate a large quantity for some special occasion. In this respect the carnation possesses marked advantage over the rose, which must be cut at a certain state of development or its value is gone. In cutting carnations many florists err in cutting the bloom before it is fully ripe. A bloom so cut will not last nearly as long as one which is cut only after it has fully developed. Some large growers who imagine they know all about carnations can ruminate on this fact to advantage. There probably are cases where neglect to properly cut the blooms is due

to carelessness or incompetent help, but the fact should spur the grower to greater care and the employment of experienced and careful help only. Where possible carnations should be cut in the morning rather than the afternoon before; those cut at the last named time do not have the crispness and keeping quality of those cut in the morning. Why this is so we cannot say, but experience proves it to be a fact. In these days of shipping and reshipping the keeping quality of any flower limits the quantity which can be profitably grown for the wholesale trade. It is presumed that the man who soaks his carnation blooms to "keep them fresh" has long since been gathered to his fathers. G.

#### Greenhouse Cart.

The accompanying sketch pictures a very convenient cart in use at Mr. D. S. Heffron's place, Washington Heights, Ill. The box is two feet wide by six in length. The paths in the greenhouses are two inches wider than the box of the cart, and admit of the cart being used in the



GREENHOUSE CART

houses. The amount of hard labor that is saved by the use of this cart is very considerable. When refilling the benches with soil, almost half a wagon load can be easily carried into the houses and put just where it is wanted with this cart. The box can be lifted from the truck frame (which is four inches narrower than the box) and the contents dumped, thus avoiding the necessity of shoveling. In carrying in lifted plants of carnations, violets or other stock the cart is equally valuable; in fact the uses for which it is available around greenhouses are legion. The cart illustrated is a home-made affair, but strong and serviceable. If furnished the wheels and axle anyone with a little mechanical skill can make one like it which will answer every purpose.

#### Impressions of Plant Leaves.

Making impressions of plant leaves is quickly and neatly done by placing carbon paper under a book-leaf with the plant-leaf slightly wilted spread on the back of the carbon paper, then roll a bottle or other smooth round thing over the book-leaf, rolling up, down and crosswise, pressing the roller upon the paper. I find such useful in making memorandums of the habit and growth of chrysanthemums, etc., in which I preserve the leaf form perfect in size and shape.

JOHN LANE,  
1801 Lake ave., Chicago.

[An impression of a chrysanthemum leaf which accompanied this note showed the characteristics of the leaf admirably, including a perfect outline and the venation.—ED.]

PROPAGATING ALTERNANTHERAS.—I propagate alternantheras in the following manner: In the month of August I make cuttings from *A. paronychioides* major in boxes of sand, putting them

close together, shade for a few days, and then let them stand until spring. About March pot them into 2½-inch pots, place in a hothed, and in two months they are fine plants. Or I take the old plants in the fall and put them in 4 or 5-inch pots. If I make cuttings in February they will root in three weeks with good bottom heat; pot them and put them in frame. The other alternantheras can be raised much easier by cuttings in the spring, especially the yellow varieties; they will root in eight days. I make generally from 100 to 150 cuttings from each plant, and then the old plants can be divided. If any one knows of a simpler way than the above, I should like to hear from them. W. A. Bock.

#### Hardy Fruiting Shrubs.

We give below a complete list of hardy fruiting shrubs exhibited by Jackson Dawson at the annual exhibition of the Mass. Hort. society Sept. 13-16, 1887:

*Ilex verticillata.*  
*Pyrus prunifolia microcarpa.*  
*Pyrus baccata aurantiaca.*  
*Lycium chinense.*  
*Pyrus Sieboldii.*  
*Pyrus chlorocarpa.*  
*Celastrus scandens.*  
*Pyrus toringio.*  
*Pyrus spectabilis aurantiaca.*  
*Pyrus prunifolia.*  
*Pyrus malus fl. pl.*  
*Berberis Thunbergii.*  
*Berberis vulgaris hypoleuca.*  
*Symphoricarpos racemosus.*  
*Prunus Virginiana.*  
*Viburnum opulis.*  
*Pyrus baccata cerasiformis.*  
*Pyrus baccata.*  
*Euonymus Americana obovata.*  
*Crataegus oxyacantha.*  
*Cornus sericea.*  
*Berberis vulgaris.*  
*Sambucus Canadensis aurea.*  
*Panax sessiliflorum.*  
*Philodendron amourensis.*  
*Alnus montana.*  
*Rosa rugosa.*  
*Pyrus Americana.*  
*Pyrus Japonica nivalis.*  
*Pyrus Japonica umbellata rosea.*  
*Prunus maritima.*  
*Prunus serotina.*  
*Rosa Arkaniana.*  
*Ilex kugivata.*  
*Taxus baccata Canadensis.*  
*Ptelea trifoliata.*  
*Lonicera tartarica.*  
*Crataegus coccinea.*  
*Cotoneaster acuminata.*  
*Cotoneaster tomentosa pyrifolia.*  
*Cephalanthus occidentalis.*  
*Rosa Californica.*  
*Lonicera flava.*  
*Lonicera hirsuta.*  
*Rhus glabra lacinata.*  
*Viburnum pubescens.*  
*Colutea arborescens.*  
*Sambucus Canadensis.*  
*Viburnum crassinoides.*  
*Aralia hispida.*  
*Cornus paniculata.*  
*Euonymus Europaeus.*  
*Berberis sinensis.*  
*Pyrus Japonica var. Maulii.*  
*Prunus Americana.*  
*Rhus glabra.*  
*Rhamnus frangula.*  
*Magnolia Umbrella.*  
*Euonymus alatus.*

MANHASSET, N. Y.—Paul F. Travers has built three new houses 100 x 24 each. They will be heated by hot water—Scolay boiler.



XANTHOCERAS SORBIFOLIA.

**Xanthoceras Sorbifolia.**

The desire to place before our readers illustrations and descriptions of "new plants" as soon as they appear is attended with some drawbacks. One of the principal of these lies in the circumstance that the plant itself is at first seen only by a very limited number of persons, and that in many cases it takes years before the gardening public in general becomes acquainted with it. Such is the case with the very beautiful hardy shrub of which we give a figure. It was originally introduced in 1868 from Mongolia by the Abbe David, it was figured in Van Houtte's *Flore des Serres*, in the *Revue Horticole*, the *Garden*, the *Botanical Magazine*, and by ourselves, on April 29, 1876. Now, after ten years or more, if we may judge from the inquiries which reach us, the plant is at length becoming known, and in order the better to secure due recognition for so handsome a shrub we think it advisable to reproduce the illustration given ten years ago.

The character we gave of it years ago, as a hardy shrub, free-flowering, and easy to force, has been maintained, so that we can but renew our recommendations in

its favor. The flowers are white, with a purplish eye, and have in their interior five yellow horns, whence the name.—*Gardeners' Chronicle*.

**Plant Notes.**

**THE CLIMBING HYDRANGEA.**—And on an oak tree near by, this woody vine is ascending at the rate of four to five feet a year. I never before saw it make such rapid growth. It attaches itself to the tree like an English ivy or "Boston" ivy.

**VALLOTTA PURPUREA** with twenty-eight scapes of flower all in bloom is the sort of specimens David Allan grows. Grand! "How do you manage it, David?" "Put a good many large bulbs into a pot, and let them get thoroughly established and pot-bound; then let them alone."

**HYDRANGEA PANICULATA GRANDIFLORA.**—Bordering a thick belt of trees and vines, in a hollow and close by a pond, is a long front line of these showy shrubs. The effect is capital. The rich,

moist land has induced luxuriant growth and large flower heads, and the great multitude so close together is very striking.

**SOIL FOR LILIES.**—I consider a medium heavy soil with a good sprinkling of sand, without any manure, the best for lilliums. In potting, I pot the bulbs so as not to fill the pot more than about three-quarters full of soil, and after they have started into growth I fill up with some richer mixture. I find it very beneficial for such bulbs as make roots on top of the bulb. AUG. S. S.

**GALLIARDIAS.**—Among hardy flowers the Boston folks seem to be especially fond of these, and in particular of *G. aristata*, var. *grandiflora* and its several forms. My attention was drawn to them in every garden that I visited. I myself grow lots of them; raised them from seed. All are good, some very fine, and I have one with florets shaped like those of *G. picta* v. *Lorenziana*, but unfortunately it is rather poor.

**CLEMATIS "ROBUSTA."**—Under this name I find at the Arnold Arboretum the same thing that a few weeks ago (page 60) I found at Woolson's under the name of *C. paniculata*. Now, the plant grown as *C. paniculata* at Harvard Botanic Garden is very different from the above. Anyhow, whatever may be its proper name, one thing is sure, that it is the loveliest blooming vine we have in September—so white, so copious, so fragrant.

**THE "FLOWERING" ANTHURIUMS**, as *A. andreanum* and *A. Ferrierense*, are prettily grown by Mr. Allan. They are set in pans and banded up all along the stem to the top. This bank is the full width of the pan at the bottom, and tapers towards the top in cone or pyramidal form. It is composed of sphagnum and orchid peat. Its surface is dotted over with such little gems as *sonorillas*, *eranthemums*, *hertolonias*, *anæctochilus* and the like.

**HYDRANGEA PANICULATA GRANDIFLORA.**—In regard to this shrub a writer in the *London Garden* says: "In addition to the great value of this as an outdoor shrub, it is often forced by English growers. By liberal feeding a fine display of bloom is obtained from plants in comparatively small pots, and during the London season they find a ready sale. The principal care in connection with them is to keep the plants well watered and the foliage clear of red spider and mildew, both of which are sometimes troublesome, especially if the plants are kept rather close to induce them to bloom early. Liberal syringing and plenty of air are the two best antidotes for these pests."

**THE "BOSTON" IVY** is the name by which we usually know *Ampelopsis tricuspidata* or *Veitchii*—and why not? We find it is quite a feature in fashionable Boston. The walls of the mansions and churches of the Back Bay are being covered with it. The houses recently built by Mr. Ames at Easton are also well clothed with this vine. It is particularly pretty on the rough or boulder-stone walls now so fashionable in aristocratic architecture. Mr. Robinson called my attention to *A. Roylei*, which he has used in company with *A. tricuspidata*. The foliage is larger and thicker, and takes on a brighter color in fall. But although apparently doing very well here, I have found that it is a little tender.





### Roses Budded on Their Own Roots.

In the issue of Sept. 15, Mr. May once more refers to this disputed question. I perfectly agree with him when he advocates the use of roses on their own roots for general culture out doors, well knowing the difficulties that beset inexperienced amateurs as well as careless professionals when they fail to remove the shoots starting from the stock, but when he or Mr. Hill asserts that roses grafted on the Manetti, or any other stock, are more subject to black spot than when on their own roots—experts and specialists in roses though they be—I have the temerity to question the correctness of their conclusions.

Mr. May says that he saw at Hill & Co.'s place, in Richmond, Ind., a lot of grafted plants that were affected by black spot, while a lot alongside on their own roots were in perfect health. Now if he will run down to Jersey City Heights, I will show him the very reverse of the case, where my grafted Bennetts and Beauties are the very picture of health and vigor with hardly a vestige of black spot, while the same kinds on their own roots are severely affected by it. But I won't go as far as Mr. May or Mr. Hill and say that the grafting in my case has had anything to do with the exemption from spot any more than I would in their case say that those on their own roots were exempt from that cause. The real fact, in my opinion, is that black spot, whether on a grafted plant or one on its own roots is simply a condition of the healthy or unhealthy state of the plant, and will be affected or not affected whether on grafted plants or on their own roots exactly as has been the good or bad culture given it. I remember when I used to grow the Hermosa rose by the thousand for market, twenty-five years ago, that our beds of it in the open ground just before lifting in October to pot up, rarely failed to be covered with black spot, a consequence usually of a cold rain following the high temperature we often have in October. Here there was no grafting, and yet came the spot just as it will do in Manetti or other roses under unfavorable conditions. Depend upon it, the grafting or not grafting has nothing to do with the spot.

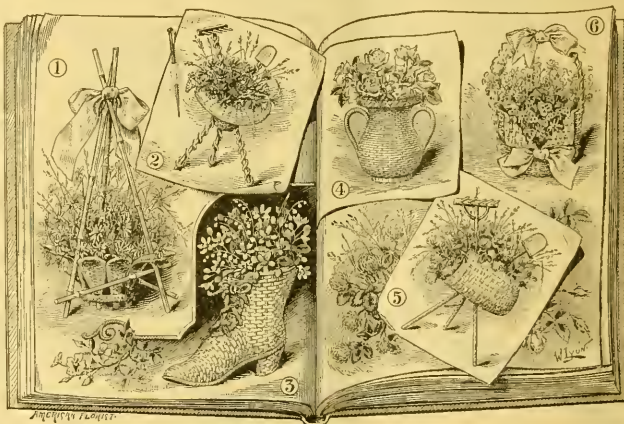
I do not claim for a moment that grafted roses have any advantage over those on their own roots for winter flowering, provided you can get those on their own roots in equally healthy condition, and my reason for grafting at all was only to get renewed vigor into stock when it has become exhausted by continued propagation at a high temperature, and this I think we have secured beyond question, for our propagations from cuttings of our grafted stock during the hot months of July and August have been most unusually satisfactory. The cuttings taken from the vigorous grafted plants rooted in one-third less time, and have made a correspondingly greater growth in consequence. These—the progeny of the grafted plants in which new life has been implanted—will make just as good flowering stock

either for winter or summer as grafted plants will, but no better.

Some of the Solons in rose growing predict that our roses will fail to carry their present vigor through the winter because of their being grafted on the Manetti—a deciduous stock. If this prediction should prove correct, I will frankly tell the readers of the AMERICAN FLORIST that they have failed. On the other hand, I invite any who hold to the opposite opinion to come at any time and examine, and if they find that my theory is correct, and that these grafted plants have not failed in consequence of their being "grafted on a deciduous stock," that they will be equally candid and admit that they were wrong in their conclusions. All we want are the facts in the case, and this experiment of ours this winter will settle it I think without a question.

PETER HENDERSON.

Jersey City Heights, N. J., Sept. 28, '87.



FLORAL FAVOR.

### Worked and Own Root Roses.

In my experience where a stock is used the Manetti is best. I would not recommend budded Perles or Niphotos; I have tried them without success and they do well enough on their own roots. Mermetts, Malmaison and The Bride do best budded when planted in a solid bed, but when on beanches it will not pay for the trouble. I have tried a large number of varieties on the seedling Brier but they did not prove satisfactory. I had budded Mermetts which bloomed well for eight years. I had a peculiar experience with a house of budded roses last spring. After I left off firing, we had several damp nights and the roses became affected with a disease which was entirely new to me. They were attacked by a fungus which made a most peculiar odor in the house. The leaves would turn as though they had been scalded with hot water and the joints turned black; after making every effort to check it I was finally obliged to pull them out. After putting in new soil I replanted the house with young plants on their own roots and they are doing well. I do not, however, attribute the disease to the fact that the plants were budded, but believe that the trouble started from the damp nights without any fire heat.

N. Cambridge, Mass. W. A. Bock.

### New Roses for 1887.

I send herewith a list of the best new roses raised here which will be sent out Nov. 1 next. Some more novelties will be sent out, but I have not placed them in my list, as I describe only those I have been able to see in full bloom in June and again this month, thus being able to judge them well and be assured of the fact that they are really remountant.

Tea, Duchesse d'Auerstedt (Bernaix). Very sarmentous and vigorous, like Noisetette Rive d'Or; very free bloomer; fine in buds; fine shape; very full; good size; very bright yellow, center slightly darker; fine dark foliage.

Tea, Vivand Morel (Bernaix). Dwarf and vigorous; very handsome buds; dark rose, when expanded, slightly shaded lighter; medium size; profuse bloomer.

Tea, Madame Joseph Godier (Pernet

fil). Dwarf and bushy; very constant bloomer; very fine in buds; very fine shape; yellowish rose, dark pink center; new color; remarkable, as in some clusters some blooms are more yellowish; exceedingly pretty.

Tea, Princesse de Sagan (Dubreuil). Plant of medium size, but stout; foliage handsome; free bloomer; fine buds and handsome when expanded; medium size; dark bright crimson, slightly purplish; color unique in teas; very good for forcing.

Tea, Souvenir de Madame Metral (Bernaix). Very sarmentous; large foliage; flowers large; very fine shape and full; dark pink or cherry red; shaded darker; very free bloomer; strong grower.

Hybrid Tea, Madame Carle (Bernaix). Vigorous growth; very free bloomer; flowers medium size, fine shape, very full; fine vivid crimson; slightly edged light pink.

Hybrid Tea, Germaine Caillot (Pernet fils). Stout grower; bushy; flowers large and shaped like Capitaine Christy; very light pink, slightly tinted yellowish in the center.

Hybrid Remontant Souvenir de Mad. Faure (Bernaix). Very vigorous; very remontant; very fine globular shape and large; bright light crimson, slightly shaded purple; very fine flavor.



Dwarf Remontant Polyantha, George Pernet (Pernet fils). Very dwarf like Mignonette; constant and profuse bloomer; very handsome shape, and full, fine buds; when expanded size of Polyantha Perle d'Or; fine pink, slightly shaded white; very pretty. JEAN SISLEY.  
Monplaisir, Lyon, France.

#### Pruning Roses.

A great deal has been said about roses in the FLORIST, but the subject is not by any means exhausted. I would like some of our leading rose growers to give us some advice as to pruning roses, especially hybrid roses for forcing. I have seen a good many growers who did all in their power to induce their roses to make strong growth, only before forcing them to cut most of it away. I do not think this is the proper way; still I have not had experience enough to feel competent to instruct, and would be very glad to have the subject discussed through the columns of the FLORIST. One thing I do know, that by sharp pruning of roses just before forcing, they will not bloom as early as if not pruned back; but we must prune to some extent to get the best result in the quality of the flowers, and also for pot plants for market, and must take into consideration the shape of the plant, so as to induce a symmetrical growth. To get a more satisfactory result, I think we ought to prune earlier; even during the growing season the plants ought to be looked after once in a while, and the strongest shoots pinched back. In this way the lower buds will be better nourished, and consequently better developed, so that when we are doing the main pruning (which should be done in the fall) we do not cut away the best buds or such as would bloom earliest. By doing the pruning in the fall, or some time before the plants are to be forced, we also give the buds a chance to swell and start more evenly.

The controversy as to the superiority of grafted or budded roses and those on their own roots may be solved by giving each variety the soil best suited for it, and we will succeed best with them on their own roots; if we use the same soil for all, we may get better results by grafting. That's the way it looks to me. AUG. S. S.

#### American Beauty.

I am one that does not believe that American Beauty and Mad. Ferdinand Jamin are one and the same. I remember the latter rose distinctly when I was with Ellwanger & Barry. This firm plants all hybrid perpetual roses outside in nursery rows, and if there is any place where we can see the characteristics of roses, it is in the nursery rows, where you can see so many of each variety together. All I noted in Mad. Ferdinand Jamin which is similar to our Beauty was its fragrance. The habit of growth and its free blooming qualities are altogether different from American Beauty. I believe that American Beauty belongs to this side of the great waters, and is a true American. Chester, Pa. D. T. CONNOR.

ROSES.—Some time ago I think I read in the FLORIST, that Mr. May was going to give us the results of his trial of "Her Majesty"—were they good or bad?—well, when may we expect them? Who has tried American Beauty (?) outside with mercury running down to 20° below zero? How about the "perpetual" flowering qualities outside? REG.



FLORAL DESIGN PRESENTED TO MRS. CLEVELAND BY THE FLORISTS' CLUB OF PHILADELPHIA.

#### Floral Favors.

No. 1 is a daisy basket, the flowerholder of which is of straw, and the supports are bamboo sticks. This basket is in the form of a daisy, the petals being lined with white satin and the disc of yellow satin. It is tied with a satin sash of Leghorn color ribbon. It should be filled with white or yellow Marguerites. Large sizes of the daisy basket are sent as gifts to debutantes. No. 2 is a sun hat on an easel composed of hoe, rake and spade. This is all woven in rush, and is a charmingly rustic favor. The sun hat is filled with corn flowers and grasses. No. 3 is a straw shoe filled with orange flowers and lilies of the valley. This is very suitable for wedding collations, but is a jaunty favor for many occasions when it could be differently filled. No. 4 is a vase of manilla rope, very neatly finished. It contains Mermet roses, and is a dainty piece to place at the covers of lady guests. No. 5 is a Shaker hat woven of Shaker straw standing on a frame of hoe, spade and rake. It is a quaint design. The hat contains clover and grasses. These hats are tinted

sometimes; those of pale pink and gray are exceedingly pretty. No. 6 is the dude's collar basket, which is again revived for a favor. It is filled with pansies and daisies, and tied with ribbons over the handle and under the "collar."

#### Floral Design Presented to Mrs. Cleveland by the Florists' Club of Philadelphia.

This design of which we give an illustration, was presented to the president's wife at the time of the centennial celebration at Philadelphia Sept. 15-17. The roses at the corners are La France and those at the sides and ends are Perles. The vase at the top was made of asters and contained a single plant of Pandanus Veitchii surrounded by cut spikes of gladiolus. The scroll is laid on a ground of ivy leaves. The whole piece reflected great credit upon the committee, of which John Wescott was chairman; the harmonious blending of colors, together with the easy and graceful arrangement of the flowers and foliage made it very attractive.





## Short Notes.

**ODONTOGLOSSUM GRANDE.**—From a large batch of these now in bloom Mr. Allan is cutting freely.

**DENDROBIUM DEAREI** is a very free bloomer; its flowers are white and borne on old and new wood. It is now about its best.

**CYPRIPEDIUM MORGANIANUM** is now in bloom in Mr. F. L. Ames' greenhouses, North Easton, Mass. It is a most beautiful orchid, bright and showy, and has four blooms on each scape. The plant is sturdy and vigorous and displays the appearance of a capital grower.

**CYPRIPEDIUM CARDINALE**, a beautiful garden form in the way of but with brighter and better flowers than *C. Sedeni*—one of its parents—is also in flower; so too is the little colored *C. concolor*, a real pretty species from Moulmein.

**CYPRIPEDIUM ARTHURIANUM.**—But Mr. Robinson, pointing with pride to a thrifty plant of this, remarked: "But this is my favorite. I think it is the prettiest of all cypripediums, not even excepting *Morganianum* or *platytanum*."

## Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1886.

Oct. 16—Tem., morning 45°, noon 52°, evening 52°. Wind N. to S. Potted rooted cuttings of *Geranium Mad. Saleroi* in thumb pots. Potted old *echeveria* s. g. Continued bedding tulips.

17—Tem. 50, 70, 50. WSW. to N. Sunday.

18—Tem. 52, 62, 52. E. to N. to NE. Propagated from offsets of *Echeveria rosacea* and potted old *Echeveria* s. g. Removed from frames to the greenhouses *echeverias*, roses and alyssums.

19—Tem. 57, 76, 70. S. Placed in sand boxes offsets of *echeverias*. Cleaned and prepared *echeverias* for propagating. [See p. 88 in last issue.—Ed.] Separated *primulas* in No. 5, which were standing too close together. Removed from frames to greenhouses *echeverias*, rose geraniums, othonnias.

20—Tem. 67, 68, 64. SW. to W. Cleaned coleus. Removed from frames sand and manure.

21—Tem. 42, 59, 54. W. to NW. Propagated *echeverias* on bench and in boxes. Took *achimenes*, tuberos *begonias*, spotted *caladiums*, etc., from bench and laid them in pots under bench in No. 2. Continued laying tulips. Cleaned and bottled seeds. Continued clearing frames of sand and manure.

22—Tem. 44, 65, 54. W. to SW. Potted *chrysanthemums* taken in from outside. Finished laying tulips. Took up old *gladioli* and spread them in hall on top boards. Cleaned frames of sand and manure. Carpenters repaired frames.

23—Tem. 55, 65, 61. S. Potted old *echeverias* and pricked offsets into boxes. Filled bottom of frames with dry leaves.

24—Tem. 56, 65, 56. SW. to W. Sunday.

25—Tem. 46, 50, 44. N. Separated, cleaned and nipped coleus. Transplanted *cinerarias* into 4-inch pots and placed them on top tables in No. 5. Cleaned and propagated offsets of *Echeveria rosacea*.

26—Tem. 42, 45, 44. NE. Commenced potting rooted cuttings of geraniums from propagating bed. Continued clearing frames of plants and manure.

27—Tem. 42, 47, 44. N. to NE. Continued potting geranium cuttings. Continued clearing frames. Took up *erythras* and put in No. 7. Rearranged plants in No. 4.

28—Tem. 45, 45, 45. NE. to N. Continued potting geranium cuttings. Cleaned frame yard, shed and beds. Carpenter repaired broken sashes.

29—Tem. 40, 52, 45. NW. to S. Same as yesterday.

30—Tem. 44, 60, 54. W. to SW. Continued potting geranium cuttings. Cleaned whitewash from glass on conservatory.

31—Tem. 44, 66, 58. S. Sunday.



CONNECTION FOR EXPANSION TANK.

## Connection for Expansion Tank.

The rather crude method most frequently adapted for connecting the expansion tank is to merely drive the pipe tightly into the hole in the bottom. This does not make a neat job, and with those who draw off the water from their pipes during the summer, the tank most generally dries up and becomes very leaky (and sometimes drops to pieces) before the season of firing comes around again. When the pipe is attached with a collar as shown in illustration a tight joint can be relied upon and in addition the tank can be readily removed by turning the tank until the collar is unscrewed from the pipe. The tank can then be kept tight by putting in a shady place and keeping it filled with water. The cost of the collars is only about twenty-five cents each.

LYNN, MASS.—The eleventh annual exhibition of the Houghton Hort. society held Sept. 20-22 was an excellent one. For cut flowers first prizes were awarded Wm. G. Stone, M. A. Noyes, Jos. H. Ledford, S. Parrott, J. Wilson, J. D. Ladd and Julia Cain. For floral work first prizes were won by M. A. Noyes, J. E. Mockett, J. O. Cain, J. P. Plumpstead, E. A. Richards and Isaac Marshall. C. W. Lewis made an excellent exhibit of plants in pots and was awarded first prize for best exhibit. J. D. Ladd received first prize for six pot plants and Jonathan Hay for finest show of rare plants.

INDIANAPOLIS, IND.—Chas. Rieman has removed to his new place, Park Heights, about two miles from the city. He will open a store at corner of Pennsylvania and Market streets about Oct. 15.

## Notes and Comments.

The initial flower show of the season was that at the American Institute fair. It was not very noteworthy, though Mr. Wilson did something to make it interesting. There were very few plants, the exhibition running largely to designs. Rather an amusing feature of this show is the amateur section. Some of the amateurs make really pretty designs, but as a rule they are not rivals to be dreaded by their professional brethren. They have lots of enthusiasm, but it is often rather misdirected. There were no novelties in plants at this show; a lot of fine dahlias and some good phlox were about the best things in cut flowers. The designs were not specially novel, though some were very well made. Doubtless many possible competitors were holding back until the next show.

I notice in the *London Garden* that our rose Marshall P. Wilder, of which we have heard so much praise, is declared to be nothing more or less than Alfred Colomb. It is an extraordinary thing—or perhaps unusual rather, than extraordinary—that two seedlings from different growers should be identical, though a good many roses of that strain are certainly very much alike. American roses seem to be in rather hard luck, for the writer in the *Garden* runs them all down, with the exception of the *Bride*.

Mr. Siebrecht is a busy man with a good many irons in the fire. He is now going in for raising palms and the like on a West Indian plantation, where neither steam nor hot water, coal or natural gas, need vex the soul of the nurseryman. It is a great idea; the only fear is lest facility of production may materially lower the market prices. However, this is not likely to be the case for some little time yet.

Certainly, over-importation seems likely to greatly lower the value of orchids. Indications point to a tremendous production of orchid flowers this winter; every one has been buying the plants, and still they come. Of course there is a good deal of trash in every lot of unpublished orchids, but this does not prevent us from getting a large supply of really good varieties. Several good small pieces of *Vanda Sanderiana* have been sold lately, which somewhat reduces the rarity of this species, though it does not prevent the Morgan plant from being *the* specimen. And we hear about every week of some orchid novelty which is to dazzle all beholders when flowering time comes.

Mr. Cottam and Mr. Le Moutl are to hold their flower shows in conjunction at the Eden Musee. Horticulture and waxworks as a combination are beginning to rather pall upon us, but I believe it was impossible to obtain any other place of exhibition in this case. But it is rather hard on good plants when they have to divide their attractions with an art gallery and a chamber of horrors, though the musee is a pretty and a well-arranged place.

Mr. Le Moutl graced the firemen's parade with a large horse in immortal, probably a relation of the fiery *Bucephalus* he showed at the Philadelphia convention.

Some very fine seedling cyclamens are to be seen at Rose Hill nurseries; they are a very large strain, having beautifully variegated leaves. The foliage is very distinct, some being margined as distinctly as a fancy geranium. There is no reason why really fine cyclamens should not take good rank as a florist's flower;

they are certainly pretty and lasting, but a good many strains are very small, and therefore insignificant. We see them quoted as regularly as roses and camellias in Covent Garden market. Some of these new varieties are a very fine red; the entire flower a rich crimson.

Rather an interesting hybrid, or rather a group of hybrids, is the result of a cross between the hardy *Rosa rugosa* and Jackson's Yellow. The raiser of these plants is Mr. Carman, the editor of the *Rural New Yorker*. They have not yet bloomed, so it is impossible to tell what the flowers will be, but habit and foliage show an extraordinary blending of the two parents. They show conclusively that the same circumstances do not always produce the same result, for some of the leaves have the texture of Jackson's Yellow, while others are just the reverse in characteristics. Probably this cross will hardly produce a florist's flower, but it is of much interest to the scientific hybridizer.

Apparently there are places in the States where that capricious sovereign, Her Majesty, is appreciated. I read a notice of it in a Georgia paper the other day; the editor commented on its immense size, beauty and delicious fragrance. He continued to say that the original stock of the plant cost \$10,000, and his subscriber (who, we must imagine, had paid up his subscription) had given \$2 for a single cutting. Evidently Georgia is the market for getting rid of our superfluous stock.

What is to be the great novelty in plants or flowers for this winter? Apparently a good many more cautions will be in the market, but it is a little hard to strike any violent novelty. It is a noticeable fact that people who buy few flowers always want roses; working girls to whom a corsage bunch is an event never care for any other flower. Middle. Bernhard expresses a preference for night-blooming cereus, but one rarely sees cactus flowers in the stores; apart from scarcity, they are not lasting enough. The ideal florist's flower must be durable and able to stand hard usage, above all other virtues. EMILY LOUISE TAPLIN.

NEW CASTLE, PA.—Paul Butz & Son have just completed another new forcing house 12 x 100, and are now constructing a new violet house.

PASADENA, CAL.—The Park Nursery Co. has completed a lath house 120 x 150 feet for growing evergreens, etc., also one greenhouse 20 x 70 and a double propagating house 21 x 70, heated by hot water.

#### SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order.

**SITUATION WANTED.**—By a gardener; single; experienced in private and commercial places; can furnish good references. Address J. A. G. care W. J. Stewart, at Bromfield St., Boston.

**SITUATION WANTED.**—As foreman on a commercial place; long experience in growing cut flowers, bedding plants and hardy stuff. Good references. Address W. 321 Webster Ave., Scranton, Pa.

**SITUATION WANTED.**—By a young German lately landed, a place as second man in greenhouse, has two years' experience. Address J. A. G. care E. H. Becker, 515 East 3rd St., Dayton, O.

**SITUATION WANTED.**—As gardener or florist; single; age 40, from Belgium; 15 years' experience in the cultivation of stove and greenhouse plants and vines; understands all branches. Good references. Address J. A. care American Florist.

**SITUATION WANTED.**—A young man with extended experience desires a private or commercial place; unmarried; can furnish satisfactory references. F. NORTH, care J. B. Gale, Williamstown, Mass.

**SITUATION WANTED.**—As a gardener, private or commercial, well up in every branch; age 26; single; 11 years' experience; total abstainer. Address particulars with wages to A. care American Florist, Chicago.

**SITUATION WANTED.**—As manager or foreman in a large floral establishment—trade or private—25 years' extensive experience in every branch of floriculture, in England, France and Belgium; 1 year in U. S. First rate grower and propagator of ferns, palms, orchids, roses and all classes of plants for cut flowers or decoration—had large business on own account for years. Good taste for floral, plant and rockwork decorations, landscape gardening and tree planting for effect. English; energetic; age 35; married, family. PTERIS, Anacostia P. O., Washington, D. C.

**WANTED.**—A young man for greenhouse work. Address DETROIT FLORAL CO., John H. Street, Detroit, Mich.

**WANTED.**—Every florist and nurseryman in the U. S. to send me their wholesale and retail catalogues. ALBERT ELLIS, 232 N. Main st., Wichita, Kan.

**WANTED.**—A practical florist who understands general greenhouse work; especially the arrangement of flowers. W. W. GREENE, SON & SAYLES, Watertown, N. Y.

**WANTED.**—Foreman (florist), one who understands all growing roses and general stock of flowers and plants; single man preferred; must be temperate and energetic. J. LARSEN, 23 East Washington St., Indianapolis, Ind.

**TO RENT.**—Greenhouses at Claymont, Delaware, and Philadelphia, on the Philadelphia, Wilmington & Baltimore railroad. For particulars, address ARTHUR M. BURTON, 304 Walnut St., Phila.

**TO LEASE.**—Will lease my greenhouses and residence of 6 rooms, 15 miles from Chicago. One rose house 30 x 40 (9 strings 1-inch pipe) set back to La France, Mermel, Perle, Bride, Niphetos, Am. Beauty and Bon Silene roses; one house 12 x 50 filled with callas, bedding plants, also 30 strings sunflowers. Houses built 1885, now in perfect repair; heated by hot water. Also 1½ acres vegetable garden. Rent \$8.00 per month including free use of stock. Only those giving good references need apply. Address FLOREST, Bradford, Ill.

**FOR SALE.**—A well established retail florist business in one of the largest cities of Michigan. Satisfactory reasons given for selling. Address C. S. care American Florist, Chicago.

**FOR SALE.**—About 500 square feet of slate for hotbed of greenhouse bed. Address Box 23, Glastonbury, Conn.

**FOR SALE.**—Hot-bed sash—A lot of A No. 1 hot-bed sash cheap; two and three years old. Write for prices. Box 23, Glastonbury, Conn.

**FOR SALE.**—600 feet 1½-inch steam pipe; 45 feet 2-inch and 3-inch, valves, etc., been used one winter. Good reasons for selling. Write for prices, etc. Box 23, Glastonbury, Conn.

**FOR SALE.**—Two second-hand boilers (in good condition), one "Weathered" No. 3, and one "Hitchings" B 11—capacity of each 30 4-inch pipe. For price address JOHN S. FORESTER, 738 Oak Ave., Evanston, Ill.

**FOR SALE.**—The undersigned offers her entire establishment, consisting of a large garden with two large greenhouses provided with hot water furnaces, one dug well of good water; water supply by hydrants; dwelling, barn and out-houses, all newly new. Five acres of land under high cultivation, garden implements, horse, wagons, cutter, harnesses, a large stock of seeds, plants, shrubbery, &c. The above is situated within the city, of easy access, and the offer is in fact a rare opportunity for a live, energetic gardener, as the business is well established and remunerative. Cause of disposal is the death of my husband. Parties desirous of purchasing will please address for particulars, MAGDALENA DINGER, Eau Claire, Wis.

### E. BENARD, ORLEANS, FRANCE. ROSES ON THEIR OWN ROOTS A SPECIALTY. NURSERY STOCK OF ALL DESCRIPTIONS.

For particulars apply to  
E. BENARD, JR., NILES, CAL.

### OUR SPECIALTIES.

## NOVELTIES IN ROSES

### AND OTHER PLANTS.

— ALSO —

### FLORISTS' STOCK FOR FORCING.

## HILL & CO.,

RICHMOND, IND.

### NOVELTIES IN ROSES.

Also the leading forcing varieties Teas, H. Teas and H. Perpetuals. 1,000 large roses in 6 and 7-inch pots: C. Mermel, La France, Sunset, Perles and Bon Silenes, at \$25.00 per 100. Chrysanthemums, best varieties, 5 and 6-inch pots, \$15.00 to \$30.00 per 100. Bouvardias, 2½-inch pots, \$5.00 per 100. Gardenia Radicans, @ \$8.00 per 100. Grand Duke Jasmine, @ \$8.00 to \$10.00 per 100. 3,000 American Holly, Hex opaca, @ \$10.00 to \$12.00 per 100. Choicest buds and cut flowers at lowest market prices.

JACOB SCHULZ, LOUISVILLE, KY.

## IMPORTED H. P. ROSES.

Worked low on the Manetta Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagation quickly. Fine plants for sale by the 100 or 1,000, at low rates.

Address  
WILLIAM H. SPOONER,  
JAMAICA PLAIN, (Boston), MASS.

## BUDDED ROSES

### For Winter Forcing or Spring Market Sales.

In excellent condition, large two year old bushes, grown out doors, in all the leading varieties of

### HYBRID PERPETUAL AND TEAS.

Ready for shipment on and after October 1st.

### CATALOGUE AND PRICES ON APPLICATION.

TERMS: Cash with order.

## SCHULTHEIS BROS.,

Rose Growers,  
COLLEGE POINT, L. I.

## BOUND VOLUMES OF

## THE AMERICAN FLORIST

VOLUME II.

Handsomely bound in cloth with leather back and corners, and title lettered on back in gilt, may now be had from this office.

Price, \$2.25.

### AMERICAN FLORIST CO.,

54 LA SALLE ST. CHICAGO.

## ROSES.

Wishing to close out the balance of our forcing roses to make room for new propagation we are offering the following plants, which are in splendid condition, at

### Extremely Low Prices.

PAPA CONTIER, 3-in., 4-in., 5-in. AM. BEAUTY, 2½-in., 3-in., 4-in., 5-in.  
THE BRIDE, 2½-in., 3-in., 4-in. C. MERMET, 2½-in., 3-in., 4-in.  
BENNETT, 2½-in., 3-in., 5-in. MARECHAL NIEL, large plants.  
PERLES, BON SILENE, NIPHETOS, SOUV. D'UN AMI, PURITAN.

Write for Prices.

B. A. ELLIOTT CO., Plantmen,  
Pittsburg, Pa.



## 🌹 The Cut-Flower Trade.

### Latest Floral Fashions.

BY OUR NEW YORK CORRESPONDENT.

Leading styles present the finest taste ever displayed in floral arrangement and blending of color. These have been displayed, most of them, in wedding decoration, for as yet there have been but few large entertainments outside of nuptial receptions, which, by the way, are given on a grand scale. The colors of flowers are matched with the foliage, which is selected from the gorgeously dyed collection that now emblazons the thickets. At a prominent wedding at Throgg's Neck, where six apartments were decorated, there was a magnificent arrangement of yellow roses in one room; all the foliage there was yellow. Gloire de Dijon roses were matched in color with autumn leaves. In the main parlor were red roses, red leaves, and 200 fairy lamps. The room where the marriage took place was draped with Puritan roses and lily of the valley, the bower being made of Marguerites. The dining room was massed with golden chrysanthemums and yellow foliage. Flowers and foliage at present in all room arrangements are placed low. A bough of yellow leaves will be adjusted over a cabinet and below the picture hung above it. A loose cluster of roses will be placed in the arching of the bough.

A decoration for a wedding in the Hoffman House was very novel. There was an arch in the vestibule that opens into the main corridor, and this was composed of grapevines with clusters of fruit. Both foliage and fruit were in perfection. In the parlors were specimen palms, from one to another of which were garlands of roses. There were pillars in the drawing room, which were formed into solid columns of pale tinted roses, with very chaste effect.

Indications point to the making up in flowers of realistic pieces, which designs, of course, require clever work. Frank Hamilton, for the reception of the Young Men's association in the new parlors of Dr. Kittredge's church, will make an elaborate mantel decoration, the fireplace underneath having flowers for flames, and the fender and fire set being made out of blossoms of yellow hue. There will be shovel and tongs of marigolds, and a teakettle standing at one side, which will be composed of pompon chrysanthemums.

Bridal bouquets are made up large and loose, and so many flowers are turned downward over the stems that there is an odd shape to the bunch. For instance, there will be orange flowers above and Stephanotis in sprays falling below, with a sash of Leghorn colored ribbon tied in the center. Bouquets for brides and for full dress occasions are to be made upon frames of light silver wire this winter, to do away with the padding required in loose bunches, and to make the cluster lighter in the hand.

At the Throgg's Neck wedding the bridesmaids (there were eight of them) carried for the first time the jubilee wreath. This wreath is a revival of the Roman style when bridesmaids bore wreaths to cast before the bride. The jubilee wreath (of which a drawing will be shown in next issue) is artist wreath in shape, being wider at the top and brought down narrow, where it is fastened together with a trailing cluster and ribbons. The wreath is made alike on both sides and, is carried over the arm.

Violet boxes in purple-tinted satin cardboard, edged with gilt and tied with bullion cord, are among Thorley's novelties. The French idea of covering hand bunches for gifts with paper wrappers is to be brought out here. A square or handkerchief of very delicate rice paper, or satin paper will have the edge cut out to represent lace. This will be bound around the rose bouquet, violet or lily cluster.

A new wreath of *Cycas revoluta* is introduced by Thorley. There are four leaves fastened to make a circle; under these purple ribbon lies to rest on. A cluster of blue lilies and purple ribbon clasps one set of stems, and a cluster of pink lilies the other. Fifteen yards of ribbon is required for this design, which is strictly for laying on caskets. It is very elegant, and will be pictured very soon.

### An Open Air Wedding.

The ceremony of a recent wedding in Baltimore was performed in the open air in a noble grove of forest trees about seventy-five yards from the house. A carpeted platform about thirty feet square was laid in the center of the grove from which a carpeted walk extended to the house. In the center of the platform stood an altar of choice roses and lily of the valley, while in front were crimson cushions for the couple to kneel upon. Over the altar suspended from the trees by smilax wreathing was a canopy of flowers eight by ten feet, fringed with an edging of smilax. About the platform was a deep edging of flowers, the whole surrounded by handsome decorative plants. All through the park and on the lawn were scattered choice palms and other specimen plants, making the whole a remarkably beautiful scene. The ceremony was performed during the afternoon. As night approached thousands of Chinese lanterns were suspended from the trees, while calcium lights added to the scene by throwing different colored lights over all, producing beautiful effects on the spray from the playing fountains. The house was also decorated with flowers in profusion, handsome designs and masses of beautiful foliage being placed with a lavish but artistic hand. Mrs. M. J. Thomas arranged the decorations.

### The Future of the Shipping Trade in Cut Flowers.

The rapid growth of the cut flower shipping trade in the last decade has certainly been remarkable, and the question arises: To what limit can it be carried? It will depend much upon the spread among growers for this trade of a knowledge of how to best cut their bloom for shipping (and their putting that knowledge to practical use), as well as to the expertness of the shipper in packing the flowers. Every shipment which is received by the buyer in good condition builds up the trade, while one received in bad shape injures it correspondingly. If the best conditions attainable are met, the growth of the shipping trade will undoubtedly continue as it has begun, for the laws of trade certainly point to the wholesaler as the proper medium for the bulk of the stock to reach the consumer—and certainly that which must be reshipped. One fact which will ever assist the shipping trade is that the retailer who is also a small grower cannot produce standard stuff—such as roses, carnations, etc.—to have a sufficient supply when he needs them, without having

large quantities go to waste at other times. He therefore cannot supply his own needs as cheaply as he can through the medium of the shipper who receives stock every day and sends the same where demand exists at that particular time. The shipping trade in this way establishes as near an equilibrium as can be attained. That the present state of the trade can be improved there is no doubt, but the very great advance made in the past is a favorable indication that the improvement will continue. It certainly lays with the grower and shipper whether the trade will improve and grow or not. G.

### California Flowers.

I read the article in the last issue of the *AMERICAN FLORIST* headed "California Flowers," by Emory E. Smith. I also read your foot notes to California Flowers in a previous issue, and I thought when I read them they were sensible and practical. I do not think the California outdoor flowers will ever compete with eastern greenhouse flowers except in cheapness. I have had some experience in growing and shipping cut flowers in quantity the last thirty-five years in California, and my experience has been that for the flowers to arrive so as to give the purchaser a chance to handle and dispose of them a three day's trip is about the limit and they must be selected with judgment at that. Some of course will carry six or more days, but they are very few, and some Mr. S. mentions will not carry over two days to be salable on arrival. I shall watch the progress of this "Cut Flower Company" with interest, but I do not want any stock in it. I can look back and think of four or more florists who came to California and started in business, and boasted they were going to "show us how to do things." But it was not long before the sheriff called to see them.

Oakland, Cal. JAMES HUTCHISON.

### New York Retail Prices.

Perles, Niphetos, Souvs., \$1 a dozen; Mermets, La France, \$2; Bennetts, \$1.25; American Beauty, \$4; carnations, 40 cents; smilax, 40 cents a string.

SAN FRANCISCO.—At the funeral of Governor Washington Bartlett which occurred Sept. 16 the floral designs were numerous and very elaborate. Among the larger pieces were a handsome scroll with "Finis" lettered on its face; the seal of the State of California three feet in diameter and most accurately wrought; a full sized floral representation of the governor's official chair; the ship of state; a miniature state capital; an urn of white roses five feet in height mounted on a pedestal draped with black; a large bible with the inscription "closed"; a large anchor composed entirely of violets, and an old fashioned printing press. In addition there was an innumerable number of columns, pillows and smaller designs. Fully 8,000 people followed the governor's mortal remains to the grave.

MEALY BUG.—A good remedy for mealy bug is kerosene oil. Take about a 3-inch pot full in three gallons of water; of course the oil will remain on top; with a hand-syringe draw up the oil from the top and put in the bottom of the pot and keep repeating it until the water gets a whitish color, then syringe your plants. I have used it on bouvardias, roses or any hard wooded plants for a number of years; it is the best I have found so far. For soft wooded plants such as oleus, don't make it so strong. W. A. BOCK.

**THE AMERICAN FLORIST**

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 cents a Line, Agate;  
Inch, 5¢; Column \$14.00.  
Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per  
cent; 12 months, 20 per cent.  
No reduction made for large space.The Advertising Department of the AMERICAN  
FLORIST is for Florists, Seedsmen, and dealers in  
wares pertaining to those lines ONLY. Please to  
remember it.Advertisements for November 1 issue must  
REACH US by noon, Oct. 25. Address,

THE AMERICAN FLORIST CO., Chicago.

## Catalogues Received.

H. H. Berger & Co., San Francisco,  
Japanese trees and shrubs; A. Giddings,  
Danville, Ill., bulbs; Robt. J. Halliday,  
Baltimore, bulbs, seeds and plants; John  
R. & A. Murdoch, Pittsburgh, Pa., bulbs  
and nursery stock; E. Y. Teas, Dunreith,  
Ind., nursery stock; H. G. Higley, Cedar  
Rapids, Ia., bulbs and plants; Fred W.  
Kelsey, New York, trees, shrubs and  
roses; Topeka Floral Co., Topeka, Kan.,  
bulbs and plants; Drumm & Baker Bros.,  
Fort Worth, Tex., nursery stock; H. Cau-  
nell & Sons, Swanley, Kent, England,  
bulbs and plants; Hamlin, Johnson &  
Co., Providence, R. I., bulbs; W. P.  
Simmons & Co., Geneva, O., plants;  
Hermann Perlich, Baltimore, fumigators;  
Walter Helms, Jacksonville, Wis., bulbs  
and seeds; Andre Leroy, Angers, France,  
nursery stock; Parker & Wood, Boston,  
bulbs and plants; John Saul, Washing-  
ton, D. C., bulbs.

**REPORT ON INSECTS AFFECTING SMALL  
GRAINS AND GRASSES.**—This report  
(which is an extract from the report of  
the entomologist U. S. Dept. of Agricul-  
ture for 1886) has been received from the  
author, Prof. F. M. Webster, La Fayette,  
Ind. The pamphlet is certainly a valu-  
able one to the agriculturist.

PLEASE DO NOT send us local checks for  
small amounts. If you can not secure  
postal note or exchange on Chicago or  
New York, send two cent postage stamps.  
In renewing a subscription a dollar bill  
is practically just as safe as a postal note  
as the latter can be cashed anywhere by  
anyone. The postal note is an advantage  
only in conveying odd amounts in a com-  
pact manner.

**HORTICULTURAL EXHIBITIONS.**—As  
arrangements are now being perfected  
for the chrysanthemum and other late  
fall shows, we consider an article on this  
subject, in another column, especially  
seasonable, and would call the attention  
of all to the valuable and practical  
thoughts on the very important question  
of making our exhibitions a success  
which it contains.

ALEXANDER MESTON, who for the past  
twelve years has been gardener to Mr.  
Dove at Andover, Mass., has been per-  
emptorily ordered by his physicians to  
Santa Barbara, Cal., on account of lung  
trouble from which he has suffered for  
several years. Before coming to America,  
some fifteen years ago, Mr. Meston was  
foreman of the fern houses at Kew.  
Alick is well and favorably known around  
Boston, and while we grieve to part with  
him, we sincerely trust the change may  
do him good. He will be succeeded at  
Andover by his brother-in-law, George  
Milton, who has been at work for him  
for some time.

## Wholesale Markets.

## Cut Flowers.

BOSTON, Oct. 10.	
Roses, Bon Silences.....	\$1.50
" Perles, Niphetos.....	4.00
" Mermets, Benetts.....	4.00
" La France, Brides.....	6.00
" An. Beauties.....	12.00
Carnations.....	1.50 @ 2.00
Tuberoses.....	1.00
Japanese Lilies.....	6.00
Callas.....	12.00
Lily of the valley.....	6.00
Asters.....	1.50
Smilax.....	12.50
Adiantum Farleyense.....	1.50

NEW YORK, Oct. 10.	
Roses, Perles, Niphetos, Souvs.....	\$4.00
" Mermets.....	5.00 @ 5.50
" Benetts.....	4.00
" La France.....	6.00 @ 8.00
" An. Beauty.....	12.00
Carnations.....	1.50 @ 2.00
Smilax.....	20.00

CHICAGO, Oct. 11.	
Roses, Perles, Niphetos.....	\$4.00
" Mermets.....	4.00 @ 5.00
" Benetts, La France.....	5.00
" An. Beauty.....	12.00
" Bous, Safranos.....	2.00
Carnations.....	1.00
Tuberoses.....	1.00
Smilax.....	18.00
Asters.....	.60
Dubias.....	2.00
Gladiolus.....	6.00

PHILADELPHIA, Oct. 10.	
Roses, Teas.....	\$1.50
" Perles, Niphetos.....	3.00
" Mermets.....	4.00
" Benetts, La France.....	5.00
" Nibs, Cooks.....	10.00
" An. Beauty.....	15.00
Carnations.....	.50 @ .75
Tuberose stalks.....	3.00
Lily of the valley.....	10.00
Callas.....	20.00
Gladiolus.....	2.00
Callas.....	10.00
Dubias.....	2.00

If you want FRESH FLOWERS of  
best quality, carefully packed and prompt-  
ly shipped, order from

**WM. J. STEWART,**

67 Bromfield Street, Boston, Mass.

**W. S. ALLEN,**

Wholesale Dealer in

**CUT FLOWERS,**

Has moved from 940 Broadway to 36 East 23d St.

**W. S. ALLEN,**

36 EAST 23rd STREET, NEW YORK.

**W. F. SHERIDAN,****WHOLESALE FLORIST**

721 SIXTH AVENUE, N. Y.

Mention American Florist

**EVERY FLORIST**

Should have our

**New Trade Directory.****NOT TOO SOON**

To correspond NOW about your Spring  
Catalogue. You can get it made better  
than ever with less bother to you,  
and plenty of good cuts, by

**THE FLORIST-PRINTER,**

Who has long experience and superior facilities.

**BE AHEAD OF THE RUSH**

And write for samples and estimates to

**J. HORACE MCFARLAND,**

Printer for Nurserymen, Florists and Seedsmen,

HARRISBURG, PA.

## Thos. Young, Jr., &amp; Co.,

**Wholesale Florists,**

INCORPORATED 1885,

23 West 23d St., NEW YORK.

**J. C. VAUGHAN,****WHOLESALE CUT FLOWERS**

Direct all cut flower orders to cut flower

department.

VAUGHAN'S SEED STORE, 42 La Salle St., CHICAGO.

**WELCH BROS.,**

WHOLESALE FLORISTS,

165 Tremont Street, BOSTON MASS.

We make a specialty of shipping choice Roses and  
other flowers carefully packed, to all points in  
Western and Middle States.  
Return Telegram is sent immediately when it  
is impossible to fill your order.

**HAMMOND & HUNTER,**

Wholesale dealers in

**Cut Flowers and Florists' Supplies**

61 West 30th Street, NEW YORK.

**JOHN J. PERKINS,**

Wholesale and Commission

**= FLORIST =**

57 West 26th Street,

(Telephone No. 672, 30th St.) NEW YORK.

Branch, 34 S. 16th St., Philadelphia, Pa.  
Greenhouses, Cresskill, N. J.**A. M. & J. B. MURDOCH,**

WHOLESALE

**CUT FLOWERS.**

510 SMITHFIELD STREET.

PITTSBURGH, PA.

SEND FOR PRICE LIST.

**CHAS. E. PENNOCK,****WHOLESALE FLORIST,**

38 So. 16th Street, Philadelphia, Pa.

**C. STRAUSS & Co.**

Telephone 977-3. WASHINGTON, D. C.

Grower of and Wholesale Dealers in

**ROSES and OTHER CUT FLOWERS**

1000 Puritan Planted for coming Winter.

**CUT FLOWERS**

The choicest Cut Flowers at lowest market rates  
shipped C. O. D. Telephone connection. Use A. F.  
Code when ordering by telegraph. For prices, etc.,  
Address,

J. L. DILLON, BLOOMSBURG, PA.

**ROSS & MILLANG,****Wholesale Florists,**

NO. 1168 BROADWAY,

(Formerly at 225 5th ave.)

Bet. 27th &amp; 29th s's., NEW YORK.

**N. F. MCCARTHY & CO.**

COMMISSION DEALERS

IN CUT FLOWERS AND FLORISTS' SUPPLIES.

We make a specialty of Mermets, Nels, La France,  
Benetts, Cooks, Perles, Niphetos, Grace White and  
Anna Webb pinks, and all other flowers in variety.  
We price list nothing but first-class flowers and make  
a specialty of shipping all flowers invariably ship-  
ped at buyer's risk. We handle as fine a stock as  
Boston produces. Auction sales of bedding plants:  
Spring sales every Wednesday and Saturday from  
April 23 to June 15. Fall sales from Sept. 17 to Oct. 1.

WRITE FOR PARTICULARS.

63 Bromfield Street, (under Hort. Hall),

BOSTON, MASS.



## Boston.

Violets will probably sell better than ever this year.

W. F. Bowditch has just returned from a trip to Europe.

Thos. Galvin is confined to his home with a very severe attack of typhoid fever.

Short-stemmed carnations have had their day here. The universal demand is for long-stemmed ones only.

Fall trade has now started in earnest. Everybody is hoping for a good frost; then up go the prices.

H. A. Siebrecht was here recently, superintending the construction of a mammoth rustic arbor at the Mechanics' fair.

W. E. Doyle is remodeling the front of his store, and will have, when it is completed, a grand show window.

James Comley has a beautiful new nasturtium which he has named Mrs. James Comley. It is a sport from an old variety; color, pale lemon, with a large scarlet blotch on each petal. It received a certificate of merit from the Mass. Hort. society Oct. 1.

Real estate improvements and changes will necessitate the removal of two prominent Tremont street florists before Jan. 1. They are now looking for available stores.

The annual election of the Mass. Hort. society resulted in the re-election of the old board of officers, with slight changes in a few of the committees.

Young Mr. Low of London, England, was in Boston and vicinity for about ten days. He is on a business trip, and is now on his way westward.

The demand which developed a few seasons ago for marigolds, calendulas, sunflowers, gaillardias, etc., for summer and fall use, has completely died out. In order to have continuous popularity, a flower must have fragrance.

A few chrysanthemums are seen here and there, but there is no general supply as yet. Large Japanese varieties continue to be the favorites, but some of the growers claim that there is more money in pompons at cheap prices than in Japanese at high figures.

The chrysanthemum show of the Mass. Hort. society will take place Nov. 9, 10, 11. The prizes are more liberal than ever before, and ought to induce some of our friends from New York and elsewhere to contribute. For twenty named plants, in not over 8-inch pots, the prizes are \$100, \$75, \$50; for display of fifteen named plants, in not exceeding 12-inch pots, four prizes are offered, viz., \$50, \$40, \$30, \$25. The premiums altogether amount to \$700.

At the October meeting of the Gardeners' and Florists' Club, after the routine business had been completed, Mr. A. P. Calder gave an informal talk on his experience at the Chicago convention. Mr. Calder spoke of the enjoyable trip of the delegates from the east, of the instructive essays, the intelligence exhibited by the delegates in their appearance and the discussions, and the great benefits to be derived from attending such a gathering. The remarks were entertaining, and were received with hearty applause.

On Thursday evening, Sept. 29, a commodious coach drew up in front of a prominent flower store in Boston, and was soon filled with a characteristic florists' crowd, who gave evidence, by their manner and by sundry packages which they stored in the wagon, that a good time was in prospect. After a ride of about five miles, they halted in front of Mr. John Galvin's residence and proceeded to unload themselves and the

bundles, and quietly transfer the same to the house. Mr. Galvin, it will be remembered, was badly injured at Rocky Point in the summer, and is now just getting able to move around a little. There was a look of genuine surprise on his face as he came slowly into the parlor on his crutches and discovered the unexpected crowd of old familiar faces there. He was still further astonished when Mr. John Duane stepped forward and, with a few words of kindly greeting, presented him, in the name of his florist and gardener friends, a magnificent gold-headed cane, and then followed by presenting to Mrs. Galvin a beautiful gold-headed umbrella. Eloquently and with much feeling, Mr. Galvin expressed his thanks and appreciation of the kindness that prompted the gift. The evening was spent very pleasantly, and all those who participated in the affair declared it to be a great success.

W. J. S.

ANONYMUS SIEBOLDIANUS.—Alongside a stump in a thinly wooded grove this pretty shrub is in good bloom. With me it is almost out of bloom.



CAMPANULA VIDALII

### Campanula Vidalii.

Although introduced from the Azores as long since as 1851, and figured in the *Botanical Magazine*, this noble campanula is still scarcely to be seen out of botanic gardens. The plant has been in flower this summer in the cool compartment of the T range at Kew, where its distinct habit and drooping racemose wax-like flowers have been very striking. The illustration, prepared for us by Mr. Weathers, shows the character of the flowers, but does not indicate the half-shrubby nature of the plant, which attains a height of some two to three feet. It is excellently adapted for the cool greenhouse or for the decoration of the summer flower beds. It was originally introduced through Mr. H. C. Watson and Mr. Peter Wallace, gardener to our old correspondent, Don Jose do Canto. — *Gardeners' Chronicle*.

BISMARCK, DAK.—At the North Dakota fair held here in September Oscar H. Will's exhibit of seeds received much favorable comment from the local press.

### Don't Favor the Auction Idea.

I notice in Sept. 1 number of the **FLORIST** a few suggestions from members which, if adopted, would very soon cause the S. A. F. to be a thing of the past. One advises an auction sale, to attract a large attendance. It would most likely have that effect at first, but the society would soon cease to exist for what it was organized. A few large growers would monopolize the sales in the neighborhood of the convention, and the convention would run in their interests. It was slightly noticeable at Philadelphia last year that each person wanted to get as many delegates to his place of business as possible, though at the same time we were treated most royally by the Philadelphia members.

If the Society of American Florists is to live, move, and have a being, keep it out of such commercial transactions as auction sales, charges for admission, and the like, for the society would not in that way be true to the purpose of its organization—for encouraging and exchanging practical knowledge and ideas, and developing a fraternal feeling and a spirit of good will among its members, even if two of the profession live on one street, so that Bro. McCrone of Connecticut may not liken us to Belfast rioters. The convention should be a time of recreation and rest to the working florist after a season of care and toil. J. M. WARD.  
Peabody, Mass.

### Black Spot.

It has occurred to me lately by a little experiment that the presence of iron in the soil or water may be a cause for black spot, and I will give my reasons for so thinking. I had occasion about three weeks ago to use a weak solution of the sulphate of iron (copperas), and having a little left in the can I syringed a few plants with the mixture to see the effect (believing, nothing ventured, nothing gained). Next morning the results were apparent, for on every leaf there were several tiny black spots, which afterward developed into the regular black spot disease, and nearly all the leaves of those so treated have fallen. If we could prove the origin of this disease to be caused by iron then what chemical or mineral can we use to neutralize its effects? If iron be the cause, it seems difficult to suggest anything when the water used in greenhouses for the most part is passed through iron pipes. Most people have seen the marks caused by a drop of the tincture of iron upon a clear surface, when it gradually spreads, and there seems to be a close affinity between the marks caused by this agency and the gradually spreading black spot on the rose leaf.

F. E. G.

### A BOSTON IDEA—A Seed Trust.

HJRAM SIBLEY is slowly recovering from an attack of partial paralysis.

LOUISVILLE, KY.—John M. Schulz has retired from business and has sold his place to Mr. Anton Hellmann.

ROCKFORD, ILL.—At the fair held here Sept. 1, Wm. Melcher received first premium for floral design, which was a large Roman urn of carnations with a band of La France and Perle roses diagonally across its face. The urn held a collection of gladioli of various shades. It was placed beneath a canopy of smilax from each side of which lace curtains were draped, the urn standing upon a pedestal of polished ivy leaves. On each side

groups of plants assisted the general effect, while in front lay a Turkish rug composed of a variety of flowers with a fringe of golden rod.

DETROIT.—A Florists' Club was organized here Sept. 16 with an initial membership of twenty. Officers were elected as follows: S. Taplin, president; Frank Smith, vice-president and J. Frederick Sullivan, secretary and treasurer; James Vernor, J. B. Thompson, Frank Smith, Philip Breitmeier and Bruno Schroeter, trustees. Meetings will be held regularly the first Monday of each month, at the club room in the Cowie building, corner Gratiot and Farrar streets. S. Taplin has opened a fine store in the new Opera House building. P. Rush & Son have opened a down-town store on Woodward avenue.

NORTH EASTON, MASS.—In addition to Mr. F. L. Ames' already extensive greenhouse establishment he is now building a \$10,000 range for cat- tleas and odontoglossums. The roof is of wood and iron, 10 x 14-inch glass, and the whole will be heated by steam. Two of Walworth's steam boilers have been put in. In the old greenhouses immediately adjoining this new range the hot-water boilers have been taken out, and an apparatus put in by which the hot water is heated by steam. Connected with these greenhouses commodious potting, seed and store-rooms are being built, and part of the cellar room is being made into a mushroom house.

## GROWTAGE'S PATENT BUILDING FOR HORTICULTURE



—GLAZED WITHOUT PUTTY.—

Endorsed by the New York Horticultural Society. Illustrated Circular mailed on application. Plans and estimates given for every description of Horticultural Buildings.

H. J. GROWTAGE,  
76 Myrtle Avenue, BROOKLYN, N. Y.

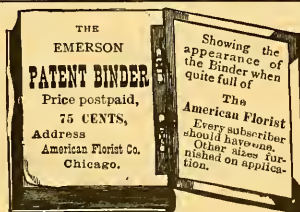
## SYRACUSE POTTERY

READY PACKED CRATES OF POTS  
Shipped at buyer's risk and freight; cash with order.  
price per crate of 3,150 Thumbs (1½ x 3 in.), \$ 5.25;  
2,625 2½-inch, \$ 8.25; 1,875 2¾-inch, \$ 7.50;  
1,150 3-inch, \$ 6.75; 875 3½-inch, \$ 5.50;  
600 4-inch, \$ 4.75; 300 4½-inch, \$ 3.50;  
320 5-inch, \$ 4.40; 160 6-inch, \$ 3.50;  
1,300 special 3-in., \$ 6.25; 1,700 No. 2 Rose, \$ 7.00.

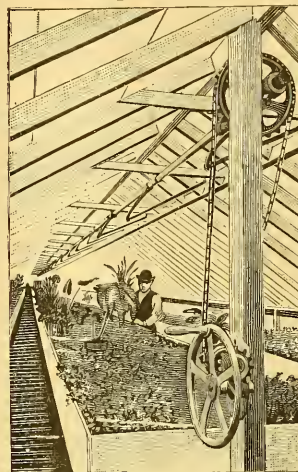
## FLORISTS' FLOWER POTS ONLY.

And we have just doubled our capacity so we can fill orders for mixed crates, one crate or 100 crates, the same day. Special low prices for large cash orders. No tick. Add 10 cents if you send a check. Ask for prices and freight rates. We will deliver pots where we agree to do it, and will compete with any pottery. Try us and see. Cash orders always filled instantly. Nine fast freight lines; no delay. Free samples with first order. Remember that no better pots than ours are made—all who try one crate concede it.

J. N. PERKINS, Manager, Syracuse, N. Y.



## Challenge Ventilator.



Without a rival either in Cost, Speed in operating or Security in case of storms.

No Liability to Break or get out of order.

Simple in construction, perfect in operation.

Parties wishing estimates will be cheerfully furnished with the same on application. In all cases, please give the following dimensions:

- 1st. Give the length and depth of sashes.
- 2d. Number of sashes to be lifted.
- 3d. The length of the house.
- 4th. The ascent from the walk to comb of the roof.

For estimates, prices, or further information, address.

QUAKER CITY MACHINE WORKS,  
RICHMOND, IND.

Mention American Florist.



TRY DREYER'S  
GARDEN SEEDS

Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free.

HENRY A. DREYER,  
Philadelphia

ONLY POTTERY MAKING A SPECIALTY OF

## FLOWER POTS

FOR FLORISTS.

THE WHILLDIN POTTERY CO.,

713 & 715 WHARTON ST.,

PHILADELPHIA.

## PATENT PLANT BED CLOTH.

SUBSTITUTE FOR GLASS ON  
HOT-BEDS, COLD FRAMES, ETC.



Equal to Glass Sash, at one-tenth the cost. Protects from Frost; allows healthful ventilation; promotes hardiness and rapid growth; keeps beds warm. Widely known and used all over the United States by florists and gardeners.

Three grades, price by the piece, 3 cts., 6 cts. and 9 cts. per yard, 36 inches wide. Don't Shrink or Decay rapidly. (Discount on bale lots). Circulars and samples free by mail.

U. S. WATERPROOFING FIBRE CO.,  
56 South Street, NEW YORK  
Mention American Florist.



## New York.

Klunder has five carte blanche weddings this month.

Paul Beers is at work at Lenox, Mass., and Carl Beers at Bar Harbor.

Mr. Henning, so long with Klunder, will probably make an engagement in Chicago.

Frank Hamilton intends opening a store for the sale of cut flowers on Fifth avenue.

Adolph Le Moults is about opening a branch establishment on Twenty-third street, in the store formerly occupied by W. S. Allen.

The chrysanthemum exhibition of the New York Horticultural society will be held in Masonic temple, corner of Twenty-third street and Sixth avenue.

Mr. John Thorpe has retired from the firm of V. H. Hallock, Son & Thorpe, and associated himself with Messrs. Siebrecht & Wadley. The new firm title is Siebrecht, Wadley & Thorpe.

An application from Richmond, Va., to the secretary of the New York Florist's Club for the constitution and by-laws of said club as a guide to the establishment of one in Richmond, indicates the spreading of interest in this direction.

Mr. John Henderson is growing pink violets, and there is to be blue lily of the valley as well as pink this season. These chemically manipulated blossoms will not bear transportation; they have a fashion of drying up in a night.

Thorley made an elegant table decoration at the Rockaway Hunt dinner the 1st inst. There was a center of single dahlias, bunches of from nine to ten American Beauty roses for the ladies, and gardenia boutonnières for the men.

Thos. Young, Jr., & Co. have opened a very handsome establishment at No. 20 west Twenty-fourth street, which has been very beautifully and conveniently fitted for the wholesale flower business. The entire house will be used by the firm, who have put in immense refrigerators, and arranged with every facility rooms for packing.

The sale of a collection of 2,000 choice orchids from F. Sander & Co. of St. Albans, England, at auction on the 4th inst., drew a large assemblage of professional and amateurs from all points of the compass. The plants were most of them established. There was one specimen Cattleya Gaskelliana, which had 300 bulbs, that sold for \$35, which may be called "a song." None of the plants brought above \$50, but they were, as a rule, small specimens.

## Chicago.

Heavy frost the night of October 11 killed all tender stuff which had not been housed.

Amasa Kennicott retires from the firm of Kennicott Bros., the Washington street wholesalers. Flint Kennicott will continue the business under the old firm name.

On the occasion of the reception of President Cleveland and Mrs. Cleveland at the Columbia theater, the interior was very handsomely decorated by Gallagher. The parquet had been floored over and it and the stage carpeted. On the stage a semicircular bower of decorative plants was very effective; we were informed that twenty-six loads of plants were used. Placed in front, at suitable distance from each other, were three handsome floral urns on pedestals; a railing in front of these was trimmed with smilax interspersed with flowers. The proscenium boxes were elaborately draped with lyco-

podium wreathing, while on the front of each was a floral star, crescent or similar design, from which was suspended a loosely filled basket of roses or other flowers. The face of the first balcony was heavily draped with green, and from each chandelier was suspended a ball of bloom. The price paid for this decoration was said to be \$2,000. The time allowed for putting up such a decoration (11 P. M. Tuesday night till 6 P. M. Wednesday) was certainly limited, and it is a fact worthy of recording that on this occasion the florist managed to finish his work on time.

HARTFORD, CONN.—The exhibition of the County Hort. Society which opened Sept. 21 was successful far beyond expectations. A large and most excellent

show of flowers and plants was a leading feature. The exhibition was continued a day longer than intended owing to the unusual interest shown.

## CARNATIONS.

FINE HEALTHY STOCK,  
BUTTERCUP, GRACE WILDER,  
GRACE FARDEN and SCARLET GEM  
Carnation Plants.

PRICES REASONABLE.

WM. SWAYNE, Kennett Square, Pa.

## NICE STOCK, LOW PRICES.

	Per 100
Clematis Virginica, strong plants.....	\$6.00
Aristolochia Sipho, 1 year, transplanted.....	5.00
Hydrangea P. G. from 2 1/2-inch pots.....	3.50
Seven Sisters Roses, from 2 1/2-inch pots.....	3.50
Hyacinthus Candicans, 1 year bulbs.....	5.00
Sugar Maple Seedlings, 6 to 10 inches.....	2.00
D. LEE & SON, Madison, Lake Co., Ohio.	

## NOVELTY! NOVELTY! NOVELTY!

## SPIRÆA PALMATA ALBA

Awarded a First-Class Certificate in London on the 17th of June, 1885.

Strong Plants, \$36.00 per 100.

A. M. C. JONGKINDT CONINCK,

Royal Tottenham Nurseries, DEDEMSVAART, near Zwolle, NETHERLANDS.

THE

American Florist Company's

# ◦ DIRECTORY ◦

OF



{ FLORISTS,  
NURSERYMEN,  
AND SEEDSMEN,

OF THE

UNITED STATES AND CANADA.

1887.

PRICE ONE DOLLAR.

The most complete and accurate list yet published. The key designates the particular branch of the trade each one is engaged in. The street and number of those living in cities will insure the delivery of tons of catalogues which have hitherto remained dead in the office to which they were addressed. At this low price every one in the trade can afford to have a copy for reference. Address

AMERICAN FLORIST CO.,

54 LA SALLE ST., CHICAGO.



**Dutch Bulbs.**  
*R. van der Schoot & Son.*  
 HILLEGOM (Near Haarlem)  
 HOLLAND.  
 ESTABLISHED 1830.  
 GROWERS OF  
 Hyacinths, Tulips, Crocus  
 Narcissus, Lilies, Etc.  
 Intending purchasers, before or-  
 dering bulbs, write us for a  
 Catalogue.  
 Mention Am. Florist.

**AUGUST RÖLKER & SONS,**  
 NEW YORK.  
 —Supply the Trade.—

**DUTCH BULBS!**  
 Catalogues on application.  
**C. H. JOOSTEN,**  
 IMPORTER,  
 3 Coenties Slip, NEW YORK.  
 Mention American Florist.

**DAHLIA** \* \*  
 \* **ODORATA.**  
 Sweet-scented Single Dahlia, very dark  
 black-brown, excellent for fine floral  
 work, offered in original roots, at  
 \$1.25 EACH; 10 FOR \$11.00.  
**J. SIEKMANN,**  
 . Kostritz (Thuringia), GERMANY.  
**SMILAX.**  
 10,000 Strings of Smilax for the trade. Steady con-  
 tracts solicited.  
**F. E. FASSETT & BRO.,**  
 ASHTABULA, OHIO.

**FRENCH AND AMERICAN**  
**NOVELTIES FOR 1887**  
 — IN —  
**ROSES, CARNATIONS, CHRYSAN-**  
**THEMUMS, GERANIUMS, ETC.**  
 Special offer of  
**OUR NEW SEEDLING WHITE CARNATION**  
**SILVER SPRAY,**  
 The Best White for Florists' use.

We have also a splendid stock of Geraniums and  
 Fuchsias in 2½-in. pots, of last spring's propagation.  
 Our Fall Price List with prices and descriptions  
 now out; send for a copy.  
**W. P. SIMMONS & CO.**  
 GENEVA, OHIO.  
 We issue no Retail Catalogue.

**CLEMATIS.** Per Doz.  
 12 fine varieties Clematis.....\$2.50  
 12 fine varieties Moss Roses, 2 year..... 1.50  
 10 choice Grape Vines, Niagara.....\$1.00 @ 2.00  
 50 varieties Dahlias, ground roots..... 1.50  
 Ampelopsis Viticuli, 2 ft..... 1.50  
 12 Chinese Peonies in var..... 1.00  
 12 Downing Gooseberry..... 1.00  
 Above in quantity at very low rates. Also all kinds  
 hardy and monthly roses, bulbs, greenhouse plants,  
 mulberry, Irish Juniper, &c. Inquiries promptly  
 answered.  
**F. A. BALLER,** Bloomington, Ill.

A CIRCULAR OF DESCRIPTION, &C., FOR OUR  
 New Tomato, "Volunteer,"  
 — AND —  
 New "Carnation Striped" Zinnias,  
 Will be sent to the trade during this month, in time to  
 insert in Spring Catalogues.

**V. H. HALLOCK & SON,**  
**QUEENS, NEW YORK.**  
  
**A LARGE STOCK OF SELECTED**  
 ROMAN HYACINTHS, LILIUM HARRISII,  
 FREESIA REF. ALBA, and a fine line of 15  
 varieties forcing Narcissus, dbl. and sgls.  
 LILIUM CANDIDUM, large bulbs; also a full assortment  
 of DUTCH HYACINTHS, TULIPS, CROCUS, &c., from the  
 best Holland growers. Select florists' seeds, Pansy, Primula,  
 Cineraria, &c. Send for Price List, now ready.  
 I am now booking orders for BOUQUET GREEN,  
 WREATHING and HOLLY. Let me have  
 your orders early.  
**JAMES KING,**  
 170 LAKE ST., CHICAGO.

**F. E. McALLISTER,**  
 — WHOLESALE DEALER IN —  
**Seeds, For the Florist** Such as Baskets, Im- **Bulbs** For the Green-  
 Market, Gardener and Farmer. mortelles, Grasses, Mosses, Bouquet Pa- house or Gar-  
 Plumes, etc den.  
**Requisites**  
 22 Dey Street, - - - NEW YORK.

**Lilium Auratum,** IMPORTED BULBS.  
 Ready October 20.  
**Chinese Narcissus,** LOW RATES BY  
 Hundred or Thousand.  
**Bouquet Green and Holly** In Quantity at Lowest  
 market rates at any time.  
**J. C. VAUGHAN, CHICAGO.**

**LILIUM CANDIDUM,** Extra select..... per 100 \$5.00  
 Fine Imported Bulbs, per 100 \$4.00, per 1,000 \$35.00  
**FINE SHEET MOSS, by Bale or Barrel.**  
**MICHEL PLANT & SEED CO.,**  
 718 Olive Street, ST. LOUIS, MO.

**SPIRÆA JAPONICA.**  
 FINE CLUMPS..... Per 100  
 LARGE "..... 6.00  
**E. SHEPPARD & SONS,**  
 234 Fairmount Street, LOWELL, MASS.

**SPECIAL LIST.**  
 Hyacinths in colors..... Per 100  
 Hyacinths, Romans..... 3.50  
 Tulips, double and single..... 2.50  
 Narcissus, Paper White and Poeticus..... 2.25  
 Lily of the Valley (ready in November)..... 2.00  
 Carnations, Hinz's White, strong..... 15.00  
 Roses, Gen'l Jacqueminot..... 4.00  
 Send for Fall List, now ready  
**A. GIDDINGS,** DANVILLE, ILL.

**A LIMITED QUANTITY**  
 Roman Hyacinths, select..... Per 100  
 Candidums..... \$5.50  
 Harrisii, extra size..... 4.50  
 If unsold on receipt of order..... 7.50  
**FREESIAS,**  
 REFRACTA ALBA and ALBA MAJOR, extra  
 sized bulbs..... 3.00  
**JOHN R. & A. MURDOCH,** Pittsburgh, Pa.

**BULBS! BULBS! BULBS!**  
 Before placing your order for HOLLAND BULBS  
 write me for my trade list. I have made special  
 arrangements with some of the largest growers  
 in Holland, and can offer you TERMS and  
 PRICES better than any other firm does. All  
 orders over ten dollars will receive a CREDIT un-  
 til May 1, 1888. Write for terms and prices.  
**E. HIPPARD,** Youngstown, Ohio.



## Philadelphia.

Trade is picking up, and the outlook for the ensuing season is encouraging.

Roses will be plentiful and good this season, if the signs do not fail; the plants never looked better. Amongst what are familiarly known as the "Darby road" florists, there will be a marked improvement over former years. George Anderson's Papa Goutiers are exceedingly fine; such growth as they have made was rarely, if ever, seen before in any rose. The Goutier seems to be taking very kindly to the soil (or the situation) around the Quaker city. Favorable reports are received from all quarters. Mr. Anderson's Perles, La France, etc., are in fine condition.

J. Wm. Colflesh has increased his area for rose growing, and his stock looks prime. W. K. Harris' American Beauty are the best I have seen this season, and his Princess Beatrice are estimated to be the best in the country. It is admitted on all sides that they are the best in this city. A very few years ago the three florists above named were not much interested in cut flowers, making a specialty of pot winter blooming plants and spring stuff, but they have awakened to the requirements of the times and are growing good flowers.

Messrs. Harris and Colflesh are strong rivals in seedling chrysanthemums. I have been informed that they possess between them upwards of 1,000 plants. A silver cup (the Sunnyside prize), value \$25, is offered by Mrs. Joel J. Bailey for the best seedling that has never before been exhibited, to be competed for at the chrysanthemum show to be held here Nov 8 to 11, inclusive. It looks as though one or the other of the gentlemen named would bear off that much-coveted prize. It will be well worth winning.

Messrs. Anderson and Harris have for the past four years promised to invent a ventilating apparatus which for simplicity, cheapness and effectiveness would outlive everything else in that line. One of the promoters has about abandoned the idea, and has bought for his own use one that is already on the market, whereas the other quite recently made the announcement that he has nearly perfected a machine which he declares will throw even the "Challenge" into the shade.

At the annual meeting of the Florists'

club the old ticket was re-elected without an additional nomination or a dissenting voice. The list of officers for the ensuing year is as follows: President, Robert Craig; vice-president, C. D. Ball; treasurer, Thomas Cartledge; secretary, D. D. L. Parson.

The essay on "How to make Horticultural Exhibitions a financial as well as an artistic success," read by C. D. Ball at the last meeting of the club, was well received and favorably commented upon.

Evans & Battles report that they are doing a nice business, even though it be so early in the season. Their store is the prettiest in the city; the deft hand of the artist is apparent on every hand.

A ripple of surprise went through the city when the report came out that Hugh Graham & Co. and C. H. Grigg & Co. had consolidated. They should make a strong team. The "opening" took place Oct. 1 and continued for several days, and took the shape of an exhibition. An amusing circumstance occurred during Graham & Grigg's show, which is sufficient evidence that the florists of this town should brush up in their botany. A bunch of white flowers in a jar looked suspiciously like a stevia, in the distance; several florists passed judgment on it, and in all cases it was pronounced to be a stevia, until a "farmer" from Montgomery county came along, when he ejaculated that it belonged to the same family as the buckwheat. "It is a buckwheat," said he—and so it proved to be. *Achillea ptarmica flore pleno* I believe was labeled "Pyrethrum" at the same show; whereupon a visitor corrected the name by writing "Akalia" on the reverse side of the label. It is no wonder that the "Illustrated Dictionary of Gardening" is meeting with a ready sale. A redeeming feature in a true florist is that he is progressive. He knows what he needs when he sees it, and he is not slow to make the investment. Mr. Pennan, the agent for the work in this country, reports that he rarely meets with a refusal to buy when it is shown to a member of the craft, be he an amateur, professional florist or private gardener.

It is reported that Mr. George W. Childs of Wootton, the noted patron of horticulture, is about to erect a large range of greenhouses, to include a palm-house, grapery and other accommodations for his rapidly increasing stock of plants.

E. D. WYNNE.

## Cincinnati.

Everybody is asking for chrysanthemums. That flower will enjoy a boom this winter.

Late wild flowers and roses are about all the blossoms now in market. Violets are coming in.

Charley McCullough, one of the seed firm, who has been making his home in California, is back on a visit.

Ladies from the suburbs have taken to wearing corsage bouquets of autumn leaves so beautifully decorated by nature.

The florists are already talking of the centennial exposition of '88. The floral shows will be made a feature of the affair.

At the base of a cross the other day a keyboard traced in flowers was the design made by Huntsman for a dead telegrapher.

Late in September the first killing frost of the year caught many of the florists who had not yet housed their winter flowers. Early chrysanthemums were badly bitten.

A lovely memorial floral piece was made by Huntsman. Two great palm leaves were crossed, and at the base was a wreath of laurel and a cluster of white roses looped with broad white ribbon.

Harry Sunderbruch has been enjoying a fortnight's recreation. He went fishing for a few days and then took his wife to St. Louis. Both were guests at the Veiled Prophet's ball. He says the floral display there was magnificent.

North side is becoming metropolitan. There are no less than half a dozen florists whose hotheouses and gardens are located there, and only the other day a new florist's store was opened. It is at the end of the Spring Grove route.

A novelty for a wedding dinner was made by Lou Kyrk of Huntsman's. It was a scroll or streamer of mixed flowers nine feet in length. Corsage bouquets to the number of twenty lined the design with their floral heads toward the plates. It was a remarkably pretty design.

One of the handsomest dinner table decorations of the week was made by the Cincinnati Floral Co. It was a round flat of roses, a couple of hundred blooms being used. There were four equal divisions of Mermets, Perles, Bennetts and Niphetos. The piece was fringed with fern leaves.

REN MULFORD, JR.

# ATTENTION!! REDUCTION IN PRICE.

## PURITAN—"THE EVER-BLOOMING MABEL MORRISON."

Plants in 3-inch pots, averaging from 10 to 12 inches in height, \$35.00 per hundred; 50 cents each in small quantities.

## MRS. JOHN LAING—The Grandest of Pink Hybrids.

As near ever-blooming as a Hybrid can be. Fine dormant plants 18 to 20 inches high, \$50.00 per hundred.

**METEOR;** the darkest of Hybrid Tea Roses; a rich dark velvety red. Large plants in 4-inch pots, \$25.00 per hundred.

For particulars apply to

**CHAS. F. EVANS,**

108 S. 12th Street,

PHILADELPHIA, PA.

## Double White Primulas.

Ready for flowering pots, \$10 and \$12 per 100, out of pots carefully packed.

**S. TAPLIN,**  
DETROIT, MICH.

## TOBACCO STEMS FOR FLORISTS,



FOR SALE, packed in  
bales 200 to 250 lbs.

No CHARGE for deliver-  
ing to depots.

PRICE:  
From \$8 to \$10 per ton,  
according to quanti-  
ties.

ADDRESS

**P. C. FULWEILER,**  
716 Arch Street, PHILADELPHIA, PA.

## DOUBLE PRIMROSES.

**Extra Large**  
**CANE STAKES FOR ROSES.**  
**ROSES.**

**BRIDE, DUKE, NIPHELOS, PERLE,**  
**BENNETT, LA FRANCE,**

And others. All grown from selected wood for  
bench planting.

SEND FOR SUMMER TRADE LIST.

**GEO. W. MILLER,**  
(Successor to Miller & Hunt.)

**WRIGHT'S GROVE, CHICAGO.**  
Mention American Florist.

## OUR NEW TRADE DIRECTORY

Contains over

**6,000 Names of (Live)**

Florists, nurserymen and seedsmen, in the United  
States and Canada.

**PRICE ONLY ONE DOLLAR.**

AMERICAN FLORIST CO., Chicago.

## CARNATIONS.

We offer to the trade very strong plants, including  
the following varieties:

**HINZE'S WHITE, SNOWDON, DeGRAW,  
PHILA., PORTIA, LA PURITE,  
C. KING, CHESTER PRIDE, &c.**

Address, **PER 100, \$10.00.**

**BRENNEMAN & PETERSON,**  
HARRISBURG, PA.

**My** **WHOLESALE AND DESCRIPTIVE** **Catalogues**  
for 1887, of Bedding Plants, Roses, Palms, Orchids,  
etc., mailed to all applicants. Large stock of the  
following on hand at cheap rates: *Ampelopsis Veitchii*, various sizes *Tca*, and *Hybrid*  
*Roses*, all the leading sorts, named *Chrysanthemums*, *Dracaa Indivisa*, various sizes,  
*Echeverias*, *Small Ferns*, *Geraniums*, double and single, best named sorts, *Areca Lu-*  
*tescens*, in 2½, 4, 5, and 6-inch pots, *Latania Borbonica*, *Seaforthia Elegans*, *Oreo-*  
*dora Eggia*, *Corypha Australis*. Other Palms, such as *Cocos Weddelliana*, *Cham-*  
*erops Excelsa*, *Phoenix Reclinata*, *Phoenix Rupicola*, *Phoenix Tennis*, *Kentias* of  
sorts. *Glazinova Insignis*, fancy named *Clematis*, and other vines, etc. Prices given  
on application.

## WM. C. WILSON, FLORIST,

Steinway's, Astoria L. I.

**SET OF 30 RAREST, MOST BEAUTIFUL**  
**CHRYSANTHEMUMS,**

By Mail or Express.

**35 VARIETIES JAPANESE LILIES.**

**JAPANESE AND CHINESE FRUIT TREES.**

**CHOICE ORNAMENTAL SHRUBS**  
**EVERGREENS, BAMBOOS,**  
**MAPLE, PLUM, FERN.**

Send for Catalogue. Address

**H. H. BERGER & CO.**  
P. O. Box 1501. 135 and 137 Washington Street,  
**SAN FRANCISCO, CAL.**

**FOR SALE.**  
**ADIANTUM FARLEYENSE**  
In 5-inch pots. \$15.00 per doz.; \$100.00 per 100.  
**PETER FISHER, Montvale, Mass.**

## CLEMATIS CRISPA.

**FOR SALE**

By the Hundred or Thousand.

**H. STEINMETZ, RALEIGH, N. C.**

**FLORISTS', LOOK HERE.**

Per 100  
Carnations, strong clumps, Hinze, Henderson, \$ 8.00  
Bouvardia clumps, double and single..... 8.00  
Roses, Marl. Planter, 2 yr., strong..... 12.00  
Marshall Niel, 2½-inch, extra strong.... 5.00  
Hydrangeas, Thos. Hogg & Otaka, 5 & 4-in. \$6 & 8.00  
(Other stock cheap. If in want, write us.)  
**PAUL BUTZ & SON, New Castle, Pa.**

We can now furnish in any quantity desired Debit and Credit Tickets of which  
we give below full size samples.

**DEBIT.**

188

**CREDIT.**

188

The debits are printed in black and the credits in red, so they can be readily distinguished. They are put up in blocks of 100; 50 of each, placed  
back to back; thus but one block will have to be carried. By means of these tickets an entry of a sale or receipt of goods can be made anywhere—in  
the house or in the field—and afterwards filed. Tickets for each transaction in your business will make data from which a book-keeper can readily  
work. With this simple and easy means of keeping a record of your business can you afford to neglect so important a matter?

Price of Tickets, postpaid, 100, 20c.; 200, 35c.; 300, 50c.; 500, 75c.; 1000, \$1.10.

**AMERICAN FLORIST COMPANY,**  
54 LA SALLE STREET, CHICAGO.





## ORCHIDS.

Their structure, history and culture (illustrated); by L. CASTLE.

This most instructive and practical work will be sent gratis, with our

### Amateur's Collection

of TWELVE ESTABLISHED ORCHIDS, blooming at different seasons, beautiful varieties, of easiest culture, for \$10.00.

Catalogue full of information on orchids free on receipt of 2c. stamp.

BRACKENRIDGE & CO.,

GOVANSTOWN, Baltimore Co., MD.

## ORCHIDS.

20,000.

In all the good flowering sorts, at moderate prices. Cut blooms at all seasons.

Seed for catalogue,

WM. MATHEWS,  
Utica, N. Y.

## \* FERNS. \*

Fine Stock of best varieties for cutting from for cut flower work. All the best new and old varieties of

ADIANTHUMS AND PTERIS.

\$8.00 A HUNDRED.

ALL IN FINE CONDITION.

GEO. WITTBOLD,

Wright's Grove, CHICAGO.

## ORCHIDS RARE PLANTS, &C.

A very large stock of choice East Indian Orchids, viz.: Phalanopsis, Bomanthera, Saccolabium, Erides, Cypripediums, Dendrobium, etc.

Also Central and South American Orchids, as Cattleyas, Lælias, Lycastes, Oncidium, Odontoglossums, well-grown plants, and at as low rates as it is possible to offer these fine sorts.

### NEW AND RARE PLANTS,

A large collection of Hothouse and Greenhouse plants, which are carefully grown, and offered at low rates.

### DUTCH BULBS,

Large importations direct from the leading growers in Holland; first quality bulbs. Catalogues on application.

JOHN SAUL, WASHINGTON, D.C.

### 50,000 TUBEROSE BULBS

FOR SALE THIS FALL.

PEARL, EXCELSIOR PEARL, and OLD DOUBLE.

First-class, 4 to 6 inches, \$12.50 per thousand.

Second-class, 3 to 4 inches, 10.00 per doz.

Send address to JAMES M. LAMB,  
SUNNYSIDE, FAYETTEVILLE, N. C.

### NEW COLEUS FOR 1888.

ALL FLORISTS SHOULD HAVE THEM.

Harry Harold and the Mikado..... 15 cents each.

Nonesuch and Purple Prince..... 10c.

The set by mail, \$1.00, two of a kind, \$1.50; per doz. \$1.00.

Express, \$10.00 per 100. Descriptive circular on application.

THOS. G. HAROLD,  
KINGSTON, Somerset Co., MARYLAND.

### 10,000 ELECTROS.



Send for List of Catalogues.

## ORCHIDS.

The largest stock in America of Orchids for Cut Flowers.

### Special Offers.

SIEBRECHT & WADLEY,

409 Fifth Avenue,  
Rose Hill Nurseries, NEW YORK.

## PALMS.

LARGEST AND BEST STOCK

— OF —

PALMS for DECORATIVE PURPOSES

In the world, not excepting Europe:

PRICES LOW.

Siebrecht & Wadley,

409 FIFTH AVENUE,

NEW YORK.

PLANTS, SEEDS AND BULBS

FINK & CO.

Postoffice Box 484,

City of Mexico.

## PANSIES

AND OTHER SEEDS FOR FALL SOWING

My collection of Pansies has for years attracted a great deal of attention; florists and amateurs both concurring to be of the highest quality.

OSCAR R. KREINBERG,

P. O. Box 294, PHILADELPHIA, PA.

Write for Price List.

## DO YOU BUY

CARNATIONS, VERBENAS, COLEUS,

GERANIUMS OR BEGONIAS?

PLANTS OR ROOTED CUTTINGS AFTER JAN. 1st.

Good varieties true to name. Good plants well packed, at low prices.

ORDER NOW FOR SPRING DELIVERY.

Correspondence solicited.

PANSIES AFTER MARCH 1.

ALBERT M. HERR,

Lock Box 338, LANCASTER, PA.

Section American Florist.

## VERBENAS.

\* MAMMOTH SET. \*

Also some of the BEST Old Sorts, transplanted on benches..... \$10.00

Rooted cuttings..... 5.00

Pot plants, ready Nov. 1st..... \$3.00 per doz.

WM. DESMOND, Kewanee, Ill.

### FOR SALE.

Hydrangea Thos. Hoag and Otaksa, 2-inch..... \$3.00

White and Pink Double Bourdard, 4-inch..... 12.00

Alternanthera, best red and yellow..... 4.00

Geraniums, best named kinds..... 3.00

Best Coleus..... 3.50

Pelargonium, QUEEN VICTORIA..... 4.00

Dracena indivisa, 5 and 6-inch..... \$2.00 per doz.

All the plants. See my Chrysanthemum Show, and select from plants in bloom, the kinds you want next year.

W. T. BELL, Florist, Franklin, Pa.

## PANSY, "SPLENDID,"

Enormous flowers, extraordinary brilliant colors. Amateurs who have seen these magnificent Pansies have declared them splendid, whence the name given to this beautiful and perfectly constant race.

Packet of 1,000 Seeds, 5 francs, (\$1.00).

WINTER STOCKS, "Snowball," Pure White.

WINTER STOCKS, "Cocardeau de Falaize," Blood Red.

The two finest Winter Stocks for cut flowers or pot culture, giving 75 per cent. double flowers.

Packet of 1,000 Seeds, 5 francs, (\$1.00).

CINERARIA HYBRIDA,

Dwarf, Semi-Dwarf and large flowering. Brilliant and varied colors, finest of the kind. Large packet, 5 francs, (\$1.00).

RED MIGNONETTE,

Very large flowering; large leaves, very dwarf and compact for potting. 5 grammes (1-6 oz.) 5 francs.

MELON, "Falaize Fertile Cantaloupe."

Of extraordinary productiveness; fruits heavy, skin thin, flesh of an exquisite red, bears on its first branches a quantity of rapidly ripened flowers; very early in frames, which it does in a most useful manner. Suitable for open culture from its hardiness.

MELON, "Improved Black Carmes."

Large, extra early in frames or open ground. Choice Seeds of the two sorts, Hecto 5 francs, (\$1.00), Kilo 40 francs, (\$8.00).

Credit for large quantities. Shipment by mail on receipt of money orders.

ALPHONSE OZOU,

FALAIZE, CALVADOS, FRANCE.

## SPHAGNUM MOSS,

Especially for Florist use, \$2 per bale, Peat \$1.25 per bbl. Sheet or Log moss, \$2 per bbl. Pitcher plants, a Wisconsin novelty, \$2 per doz. (800). A Lycopodium in its season at lowest prices per bbl. or ton.

Z. K. JEWETT, Sparta, Wis.

## ZIRNGIEBEL'S

IMPROVED : GIANT : TRIMARDEAU.

Seed of that magnificent strain of PANSIES now ready.

1,000 seeds trade packages at \$1.00 each.

DENYS ZIRNGIEBEL,

NEEDHAM, MASS.

TO THE TRADE ONLY,

My New Special Offer of

EXTRA CHOICE FLOWER SEEDS

Is published now, and may be had on application.

FRED ROEMER, Seed Grower,

QUELDINBURG, GERMANY.

PANSIES ONLY! The grandest collection ever offered, including ALL the latest NOVELTIES. Our Seed is warranted to be FINE, PURE and strictly FIRST-CLASS. Send for new Circular and Special Price List to the Trade.

ALBERT BENZ, Douglaston, N. Y.

HIGLEY'S TRADE LIST OF SEEDS, PLANTS, BULBS

AND FLORISTS' REQUISITES

Now out. If you do not receive one, send for it. Address

HENRY G. HIGLEY,

CEDAR RAPIDS, IA.

THE NEW ROSE-COLORED VIOLET

Mme. Millet.

A first-class novelty; perfectly healthy; very profuse flowering, and sweeter than any in cultivation.

PRICE, 3-inch pots, each 40c.; doz. \$3.00; 100 \$15.00.

J. COOK, 318 CHARLES ST.,

BALTIMORE, MD.

OUT WITH THE LATEST!

CARNATION - CULTURE

No Carnation Grower should be without this book. The only standard work in Europe or America, and is recognized as authority on this important plant. Price, 15c. Table of Contents free.

LORA L. LAMBORN,

Box 592.

Alliance, Ohio.



## Decorative Table Plants.

Early in the year attention was drawn to the propagation of plants suitable for table decoration; amongst them none are more serviceable than dracaenas, which, having received proper treatment will have well filled their pots with roots by this time, and now require some fertilizer to assist further leaf development. In order to bring color fully into the foliage the shading blinds should be thin and only drawn over the plants during the warmest part of the day, while the plants should be raised near to the glass, given free space to grow in and kept clean by sponging. Of the new kinds we find Dracena Mrs. Robert Turner to have a good habit and bright color, and a desirable addition to those we previously named. Crotons should be also nourished in the same manner, and all the light possible consistent with safety from scalding. The varieties possessing the graceful character of *C. angustifolius* and *C. Johannis* are suitable varieties, and should be grown on quickly in a high, moist temperature, and kept to a single stem, which should be staked if necessary. Cuttings of crotons may be propagated now; straight shoots well furnished with healthy foliage should be selected, placed singly in 60-sized pots and plunged in sharp bottom-heat, under hand-glasses; a pine-stove is a suitable place. To the palms before named I would add *Chamaedorea elegans* and *Calamus plumosus*; they are useful kinds, and the spiny stems of the latter give it a very distinct appearance. Any of the species that are pale in color through being kept in small pots can be readily improved by the use of fertilizers, and should scale appear it should be at once removed by sponge and soapy water. These remarks also apply to species of *aralia* and *pandanus*; the stock of the latter may now be increased by propagating the best colored suckers, while the variegated pineapple, which is admirably fitted for table use, is best raised from crowns, as they grow into better furnished and more graceful plants than suckers. In watering and syringing it should be remembered this plant should not be kept very wet at its roots, and it requires but little shade. The stock of the common *selaginella* should not be overlooked; it is most generally serviceable when grown in 48 and 60-sized pots, in which the cuttings should now be inserted thickly, if plants are wanted for winter use. Small plants of *Selaginella Martensii variegata*, *S. Lyallii*, *Isoplepis gracilis*, *Panicum variegatum*, and the maidenhair and other slender ferns which are indispensable for the embellishment of epergnes, vases, etc., should be grown on moist shelves. —

Thos. Coomber, in *Gardeners' Chronicle*.



FOR THE TRADE.  
**FLORAL WIRE DESIGNS.**  
JAS. GRIFFITH.

THE PIONEER MANUFACTURER IN THE WEST,  
305 Main Street. CINCINNATI, OHIO.  
SEND FOR WHOLESALE PRICE LIST.



## Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

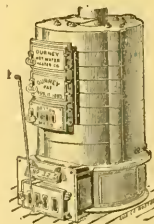
### GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

Mention American Florist.

L. Wolff Mfg. Co., 93 to 111 W. Lake St. CHICAGO

## GURNEY'S NEW HOT WATER HEATER.



### THE CHEAPEST AND BEST FOR GREENHOUSES AND CONSERVATORIES.

THE GURNEY HEATERS present more water surface to the direct action of the fire than any others known to us in use. They are the easiest to keep clean, and with due attention almost any kind of fuel may be used.

### EASILY REGULATED. SIMPLE AND EFFICIENT. SAFE AND ECONOMICAL.

MANUFACTURED BY THE  
GURNEY HOT WATER HEATER CO.,  
237 FRANKLIN STREET, BOSTON, MASS.



JOHN A. FISH, Managing Director.  
SEND FOR PAMPHLET AND PRICE LIST.

SELLING AGENCIES.—M. H. Johnson, 140 Centre Street, New York. Rice & Whitacre Manfg. Co., 42 N. Myrtle Street, Chicago. (West and Southwest). T. R. Chase, 31 Edmund Place, Detroit, Mich. (for Michigan and Ohio). Wm. Gardiner & Co., Portland, Oregon.

## SASH BARS MADE OF CLEAR CYPRESS LUMBER.

Equal to Red Cedar in durability. Plain Bars  $1\frac{1}{2} \times 1\frac{1}{2}$  inches kept in stock. Price 2 cents per lineal foot. F. O. B.

Lockland Lumber Company, Lockland, Hamilton County Ohio.

## BLACK HAMBURG GRAPES. "GRAPE DUST" AND MILDEW.

BENJAMIN HAMMOND, ESQ., Esteemed Friend: Enclosed please find check for Grape Dust, etc. I have delayed remitting for this bill until I could report on the efficiency of the preparation. Three vines in my arapery—Black Hamburgs—were seriously attacked with mildew, on both leaves and fruit. Three applications of the Grape Dust entirely removed it, and the crop has ripened perfectly. The formula for its preparation, which you kindly sent me, shows it to be non-poisonous and entirely safe for use upon fruit to be eaten. Yours, very truly, JAMES WOOD.

For Sample, send stamps to HAMMOND'S SLUG SHOT WORKS, Fishkill-on-Hudson, N. Y.  
SOLD BY THE SEEDSMEN OF AMERICA.

## Ives' Putty Machine.

Patented Jan. 8, 1887.

The best device ever invented for laying putty. With this you can make old leaky sash perfectly tight without removing the glass. It will do the work of five men in bedding glass.

Sent by Express on receipt of price, \$3.00.

J. H. IVES, DANBURY, CONN.



THE TRIUMPH & PEERLESS STEAM HEATER HOT WATER BOILERS. ADDRESS: RICE & WHITACRE-MFG. CO. CHICAGO, ILL.



ALL SIZES OF SINGLE AND DOUBLE THICK

## GLASS FOR GREENHOUSES.

ALL GLAZIERS' SUPPLIES.

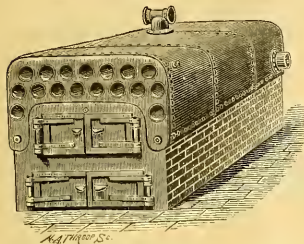
Write for Latest Prices.  
Mention American Florist.

ESTABLISHED 1854.

**Devine's Boiler Works**

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers.



Capacity from 350 to 10,000 feet of four-inch pipe.  
Send for New List.

**PETER DEVINE,**

387 S. CANAL ST.,

CHICAGO.

ESTABLISHED, 1866.

Floral Wire Designs,

Manufactured by

**N. STEFFENS,**

335 East 21st Street, - NEW YORK.

**Conservatories**

GREENHOUSES, ETC.

Erected in any part of the U. S. or Canada  
Glazed on the

Helliwell Pat. Imperishable System

OR WITH PUTTY.

For further testimonials, illustrated catalogue or estimates address

**JOSEPHUS PLENTY.**

HORTICULTURAL AND SKYLIGHT WORKS.

Offices, 144 Pearl Street, NEW YORK.

**FOR SALE.****THE CUTS**

USED IN ILLUSTRATING THIS PAPER.

Write for prices on any which you have seen  
in previous issues and would like.**AMERICAN FLORIST CO.**

CHICAGO.

**HALES' MOLE TRAP**

For destroying ground moles in lawns, parks, gardens and cemeteries. The only PERFECT mole trap in existence. Guaranteed to catch moles where all other traps fail. Sold by seedsmen, Agricultural Implement and Hardware dealers, or sent by express on receipt of \$2.00 by H. W. HALES, RIDGEWOOD, N. J.

**Greenhouse Heating AND Ventilating****HITCHINGS & CO.**

233 Mercer Street, New York.

Five Patterns of Boilers.

Thirteen Sizes,

Corrugated Fire Box Boilers

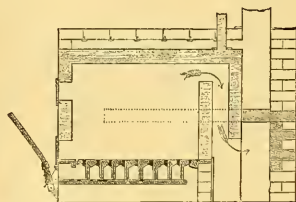
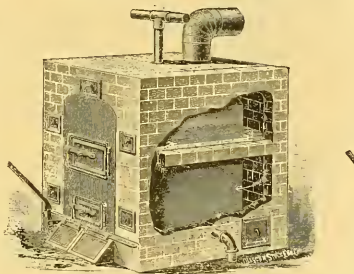
Saddle Boilers,

Conical Boilers,

Base Burning Water Heaters

Perfect Sash Raising Apparatus.

Send 4 cents postage for Illustrated Catalogue.

**GREENHOUSE HEATING APPARATUS.**

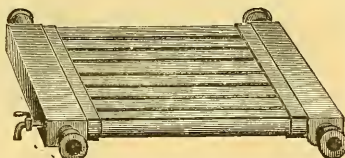
THE "ECONOMIC"

WROUGHT-IRON WELDED BOILER FOR HOT-WATER HEATING.

— SUITABLE FOR ANY KIND OF FUEL. —

THE ECLIPSE MANUFACTURING CO.,

125 South Clinton Street, CHICAGO, ILL.

**DICK'S HOT WATER GRATES**

Are more economical in fuel and will last THREE TIMES as long as the solid grates; they can be used in connection with Hot Air Flues. Send for circular of

TUBULAR SADDLE BOILERS AND GRATES'

TO

**JOHN DICK, JR.,**

273 South 11th St., Philadelphia, Pa.

**THE AMERICAN FLORIST COMPANY'S****• : DIRECTORY : •**

OF

**FLORISTS, NURSERYMEN AND SEEDSMEN**

OF THE

**UNITED STATES AND CANADA.**

1887.

**PRICE ONE DOLLAR.**

The most complete and accurate list yet published. The key designates the particular branch of the trade each one is engaged in. The street and number of those living in cities will insure the delivery of tons of catalogues which have hitherto remained dead in the office to which they were addressed. At this low price every one in the trade can afford to have a copy for reference. Address

**AMERICAN FLORIST CO.**

54 LA SALLE ST., CHICAGO.



## Index to Advertisers.

Advertising Rates, etc.	113	Lee, D. & Son.	118
Alber, W. S.	119	Lockland Lumber Co.	121
Bailey, F. A.	119	McAllister, F. E.	119
Bayersdorfer, M. M. &	122	McCarthy, N. F. & Co.	115
Bell, W. T.	123	McFarland, J. Horace.	115
Benard, E. Jr.	113	Matthews, Wm.	123
Beitz, Albert	123	Mebel Plant Seed Co.	119
Berger, H. H. & Co.	121	Miller, Geo. W.	123
Blanc, A.	123	Monon Route	126
Brackenridge & Co.	123	Murdoch, A. M. & J. B.	113
Brugge, L. B.	122	Nardoch, J. R. & A.	119
Brenneman & Pether-	121	Myers & Co.	126
son.	121	Ozou, Alphonse.	123
Butz, Paul, & Sons.	121	Perkins, Chas. E.	115
Cardomy, J. D.	126	Perkins, John J.	117
Cook, J. J.	123	Perkins, J. N.	117
Desmond, Wm.	123	Plenty, Josephus.	125
Devine, Peter	123	Price, Charles S.	122
Dick, John Jr.	123	Quaker City Machine	123
Diez, John L. & Co.	122	Works	117
Dillon, J. L.	115	Reed & Keller.	125
Dreer, H. A.	117	Rice & Winters	123
Eclipse Mfg. Co.	125	Co.	124
Elliot, B. A. Co.	113	Romer, Frederick.	123
Evans, Chas. F.	120	Rolker, Aug. & Sons.	119
Exeter Mach. Wks.	126	Ross & Milling	115
Fassett, F. E. & Bro.	119	Saul, John.	123
Fink & Co.	123	Schulz Bros.	113
Fisher, Peter.	121	Schulz, Jacob.	113
Fowler, P. P.	123	Scollay, John A.	119
Gasser, J. M.	126	Shepard, P. & Sons.	119
Giddings, A.	126	Sheridan, W. F.	115
Goldman, M.	126	Siebrecht & Wadley.	123
Griffith, Jas.	124	Siekman, J.	119
Growth, Henry J.	117	Simmons, W. P. & Co.	119
Gurney Heater Co.	124	Situations, Wants etc.	113
Hales, H. W.	125	Stedens, N.	125
Hallack, V. H. & Son.	119	Stenmetz, H. H.	119
Hammond & Hunter.	115	Stewart, Wm. J.	111
Hammond's Snap Shot	124	Strauss, C. & Co.	115
Hart, Thos. C.	123	Swayne, Wm.	118
Herr, Albert M.	123	Taplin, S.	121
Higley, Henry G.	123	U. S. Waterproofing	121
Hill & Co.	119	Fibre Co. Schout, R. & D.	119
Hippard, E.	119	Son.	119
Hitchings & Co.	123	Vaughan, J. C.	115
Hooker, H. M.	123	Weathered, Thos. W.	126
Ives, J. H.	124	Welch Bros.	115
Jewett, Z. K.	123	Whildin Pottery Co.	117
Junkpitt Connick, A.	123	Wilks, S. Mfg. Co.	126
M. C. C. H.	118	Wilks, W. C. Co.	121
Joosten, C. H.	119	Withold, Geo.	123
Kim, James.	119	Wolff, L. Mfg. Co.	124
Kirk, W. C.	122	Young, Thos. Jr. & Co.	115
Kriebner, Oscar R.	122	Zirngel, D.	123
Lamb, Jas. M.	123		
Lamborn, Lora L.	123		

CHARCOAL.—One of your subscribers inquires "If charcoal mixed with potting soil helps to keep the soil sweet?" Most certainly it will. I always use it, and have been using it continually the last ten years. It is very beneficial when mixed with the soil for such plants as cinerarias, primulas, begonias, gloxinias and others which require plenty of room for their roots, and also rich loose soil. By using it coarse, it keeps the soil open and porous, which stimulates growth and tends to give the plants a richer green color and healthier appearance.

AUG. S. S.

## SOMETHING NEW

IN

## Heating Apparatus

—FOR—

## GREENHOUSES.

Send for Illustrated Catalogue.

J. D. CARMODY,

EVANSVILLE, IND.

## ATOMIZER &amp; SPRINKLER



plants. Moistens them as if by a fog. Unequaled for destroying insects. Fits instantly. Its uses impossible to describe here. Enclose stamp for illus. pamphlet and price to agents. Remember, no stamp, no attention. M. GOLOMAN, Patente, Pittsfield, Mass.

Delegates to the next convention will travel Pullman Car Line via the

**MONON ROUTE**  
TO AND FROM  
Louisville, Indianapolis, Cincinnati and the winter resorts of Florida and the South. For full information address

E. O. McCormick, Gen. Passenger Agt., Chicago.

## IMPROVED BOILERS

FOR HEATING

# GREENHOUSES

GRAPERIES, POULTRY-HOUSES, ETC.

ALSO FOR HEATING

WITH HOT WATER UNDER PRESSURE.

## VENTILATING APPARATUS

For Raising Sashes in Greenhouses.

## GALVANIZED SCREW EYES

And Wire for Trellis Work.

Send for Catalogue.

**Thos. W. Weathered,**  
46 & 48 MARION ST., N. Y.

Sectional View.

Mention American Florist.

## HEATING APPARATUS

FOR

# Greenhouses, Etc.

## CAST IRON PIPE AND FITTINGS.

**JOHN A. SCOLLAY,**  
74 & 76 Myrtle Ave., Brooklyn, N. Y.

## Improved Hot Water Boilers

For Heating

# Greenhouses, Graperies, CONSERVATORIES, ETC.

ALSO

Cast Iron Pipe, Fittings, Valves and all Material for Heating by Hot Water.

Send for Catalogue.

## MYERS & CO.

1173 So. 9th St., PHILADELPHIA.

# GREENHOUSE HEATING

BY STEAM, BY HOT WATER, BY COMBINATION STEAM AND WATER.

## EXETER MACHINE WORKS,

19 FEDERAL ST., BOSTON, MASS. WORKS—EXETER, N. H.

## THE CELEBRATED WILKS WATER HEATER!

For Heating

## GREENHOUSES, DWELLINGS, POULTRY HOUSES, STORES, BATH TUBS, ETC., ETC.

Send for Price List.

**S. Wilks Mfg. Co.,**  
Cor. Monroe & Clinton Sts., Chicago.

## PAT. ZINC JOINTS

For Butting Glass without Laps.

Make it air and water tight. No breakage from frost. Saves fuel and glass.

**J. M. GASSER'S**

**J. M. GASSER.**  
71 Euclid Avenue, CLEVELAND, OHIO.  
Mention American Florist.

# THE AMERICAN FLORIST



America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. III. CHICAGO AND NEW YORK, NOVEMBER 1, 1887. No. 54.

## THE AMERICAN FLORIST

Copyright, 1887, by American Florist Company.  
Entered as Second-class Mail matter,  
Published on the 1st and 15th of each month by  
*THE AMERICAN FLORIST COMPANY*.  
GENERAL OFFICES, 54 La Salle Street, Chicago.  
EASTERN OFFICE,  
Room 81, Vanderbilt Building, New York.

All communications should be addressed to the  
general office at Chicago.

SOCIETY OF AMERICAN FLORISTS.—E. G. Hill,  
Richmond, Ind., president; John N. May, Sum-  
mit, N. J., vice-president; M. A. Hunt, Terre  
Haute, Ind., treasurer; Wm. J. Stewart, 67 Brom-  
field street, Boston, Mass., secretary. The 19th  
annual meeting at New York, Aug. 17, 18, 19,  
1888.

Thinks the Constitution is "Still There."

EDITOR AMERICAN FLORIST:—The editorial comment on the executive committee in the last issue deserves a passing word of explanation, and I might say correction, at my hands. You state a necessity which in fact does not exist, viz., the amendment of the constitution and by-laws to make them "conform to the general change and," etc., in the appointment of the present executive committee. Why, bless your soul, Mr. Editor, nothing so radical as that is necessary to "conform and," etc. The constitution, article iv., covers the case of Mr. Thorpe, who retires to make way for the junior ex-president, Mr. Craig, who becomes a member of the executive committee by virtue of the office he has just vacated. Article v. of the same instrument covers the case of Messrs. Jordan and Halliday, whose three years' term has just expired. The inability of Mr. Murdoch to be present at either the executive meeting or the annual meeting, as reported by the secretary, necessitated, in the judgment of the officers, the appointment of another in his stead; this case is covered under the same article v. Two members resigned; three were elected to office, viz., Hill, May and Stewart, which, in the judgment of your writer, virtually vacated their places on the executive committee, and under the same article v. the duty of appointing their successors, and the successors of the two who resigned, devolved on the president.

I fail to see wherein either the spirit or letter of the constitution has been violated, and I am doubly surprised to see our able editor walk into the shafts head foremost, when he was really the builder and framer of the instrument threatened.

The appointment of six members adjacent to or near the city of New York was done in the interest of the society's finances; it would necessitate a greater expenditure of money to get the executive committee members to the midwinter meeting had a majority lived very remote from the place of meeting. In regard to

Indiana and its representation, it may be mentioned incidentally that Hoosierdom is an important factor in any event of national importance; the sensible move of the society's treasurer to a place of safety with the society's money is commended by all the members of the S. A. F., and it has augmented the size of the Indiana delegation on the society's board; but this cannot be charged to the appointing power.

E. G. HILL.

[In the official notice of this appointment the FLORIST was not notified of any resignations or substitutions for absentees; hence our ignorance and error, for which we are possibly excusable under those circumstances. Although we have not as yet received notice of the appointment of the FLORIST as "official organ" of the society (possibly delayed in the mail), yet it has at all times and with the best intentions given prompt publicity to the official proceedings, and forwarded the interests of the Society of American Florists as far as lay in its power; hence we might, no doubt, with propriety ask in this connection the length of the terms of the various members and whom they succeed, that any of the good and true 600 society members, many of whom subscribe to the FLORIST, may peruse the same at their autumn firesides.—ED.]

### Notes and Comments.

At the October meeting of the New York Florists' Club the subject for discussion was the centralization of the cut flower trade. However, this discussion was deferred until the next meeting, the time being occupied by a debate as to the expediency of electing ladies as members of the club. There was a certain amount of opposition to the introduction of this measure; whether the objectors think that the entry of petticoats will give a frivolous character to the meeting, history does not say. I believe that feminine members are admitted to the florists' clubs in other cities, and they certainly form a much interested contingent in the national society. The advantage of a feminine annex to the florists' club is that the ladies are thus organized to receive their guests at each convention. Of course the ladies might organize independently for this purpose, but they are more likely to come together through the club, and it will certainly require some months of preparation before receiving the many guests we may expect next year.

Mr. Wilson has imported some new and handsome ferns; a new nephrolepis is, like most of its family, specially adapted for a fine specimen plant. There is nothing mean about its name either; it is *Nephrolepis rufescens tripinnatifida*. This title is extremely descriptive, and specially adapted for the use of amateurs;

it cannot fail to inspire them with a love for the noble science of botany.

A new crested pteris is another good thing; it is evidently a crested form of *P. albo-lineata*, and though sent out as *P. Mayii*, its correct title should be *P. albo-lineata Mayii*, though this makes a distinctly cumbersome title. Ferns are usually freighted with as many names as Russian royalty, and the usual practice seems to be to increase the length of the name in an inverse ratio to the size of the plant.

A good many varieties of pteris seem likely to be very popular for general utility work, they stand so well and are usually graceful. Perhaps *P. cretica* is most extensively grown and most generally useful. *P. scaberula* is a beautiful thing with finely-cut fronds, but I believe it is deciduous and has a painful habit of dying down just when needed; it proves a snare and a delusion to those who do not know its deciduous tricks.

Mr. Wilson has a new rose—a variegated form of *Niphetos*; not variegated flowers, like our old friend American Banner, but green and white flowers, prettily marked.

Another handsome variegated thing is *Ficus elastica variegata*. The marking is extremely handsome, shading from pale yellow to green, and the general habit is as robust as in the plain green variety. This is not always the case with variegated sports; undoubtedly the original cause of this peculiarity is a deficiency of chlorophyll, producing a condition like anemia in human beings. Subsequent plants may retain the peculiarities while partially recovering from the cause, but they are hardly likely to be thoroughly robust. However, the variegated *ficus* seems to be very vigorous.

Imported orchids, both established and unestablished, are still being sold by auction in tremendous quantities, and of course every amateur with the orchid craze is buying lavishly, to the disgust of the regular dealers. Though auction buying by amateurs, or professionals either, is not without a pleasing uncertainty. A man never fully realizes how much utterly useless and weedy trash the orchid family contains until he buys an assorted lot of epidendrums or the like, just fresh from their native forests. Established orchids from foreign nurseries are not as uncertain as these other importations, but as a rule they are even more interesting to the entomologist than to the botanist. They will develop more varieties of insects in a week than one can locate in a month, and the worst of it is that they stock everything in the place with this vermin. In any place where they are suffering from black scale, a pest it seems impossible to get rid of, you always find that it originated in a batch of stuff from a foreign nursery. One of these days we shall have to establish a



quarantine for foreign plants until they are declared clean and free from insects or disease.

Papa Gontier seems to be gaining in reputation; some growers are ready to declare that it flowers with greater freedom than Bon Silene, our old stand-by. It certainly is very satisfactory, always clean and robust, and the flowers are rarely seen off-color. But every grower is sure to have his pet roses as well as his favorite methods of growing them. Witness the present discussions as to roses on stocks and roses on their own roots, or replanting every year versus growing old plants. Niphetos certainly seem to increase in size and beauty with the age of the plants; the finest roses of this variety I have ever seen were on plants that had been forced for ten years.

Mushroom growing under the benches is a great success, according to Mr. Wilson, and a very remunerative crop too. There is no reason why it should not be done in most establishments; after preparing and spawning the bed, it is darkened by a screen of shading put in front, and there is very little further trouble. This utilizes every inch of space in a house, and produces a paying crop above and below. EMILY LOUISE TAPLIN.

#### Odds and Ends.

While walking recently through the greenhouses of R. J. Halliday I was shown that gentleman's method of furnishing table decorations at short notice. One entire side of a large house was filled up with shallow pans of various shapes and sizes, all planted thickly with common lycopodium; in addition some contained ferns, dracenas, etc.; when required the pans are arranged with flowers, plants, or both, as the nature of the order demands, and a very handsome center piece is the result. They can be arranged at little cost to the florist, and the pans being generally returned, renders this very simple method all the more profitable. I did not argue the point with Mr. H. when he impressively remarked: "They pay, sonny; they pay."

The violet disease is receiving its share of attention from florists in this "neck o' woods," but so far nothing satisfactory has been developed as to the cause, or a possible remedy for the trouble. Some growers contend that the disease is a result of propagating from plants forced during the winter, but the assertion does not hold good, as I have seen plants badly diseased that had never been forced at all. Another theory, that the disease arises from the use of light, rich soil, is equally untenable, for my own violets, grown in well-enriched soil, have so far shown no signs of disease, while plants grown by a neighbor of mine, in freshly broken and unmanured ground, are badly diseased. I was shown the other day a lot of violets—Marie Louise, double white, Mme. Millet and an English variety known as Deparima—all growing side by side, but Marie Louise alone showed the disease. I believe the trouble is entirely climatic, and as in some measure preventive, I would suggest the diligent grubbing out and destruction of all plants showing disease during the summer. I have known the plan to be very effective in checking the spread of black spot.

I had no conception of the deplorable condition of American horticulture or the entire absence of taste shown in our works, until I had digested the effusion of a "Gentleman's gardener" (p. 86). If your correspondent desired to prove that

nine-tenths of American horticulturists were men of unusual ability, taste and culture, he had an easy task before him; but to me his remarks are simply an arraignment of American gardening generally. Horticulture in this country has not reached its zenith; nevertheless there are countless beautiful spots scattered all over America to which we can point with justifiable pride as evidences of taste and skill that could not be excelled in all Europe. I have always felt extremely proud of our horticultural attainments, and it is like being rudely awakened from some pleasant dream to be told that as yet we are unable to "muster taste enough or leisure enough for anything like gardening," or that when admiring the beauties of Central park we were wasting our admiration on an "attempted conglomeration" singularly destitute of one "noble or original feature." Alas! alas! Private gardening, like all other branches of American horticulture, is still

fact that a "Gentleman's Gardener" has not seen "any good garden work in America." I would suggest two reasons—either his travels have been confined to a very limited circuit, or he is so thoroughly saturated with Anglomaniac that nothing American can find favor in his sight.

Amongst the novelties exhibited in Baltimore during the past season was a seedling geranium—double—from the private greenhouses of Hamilton Easter, Esq. It was exhibited under the name of Stewart P. Easter, having been christened in compliment to the young "lord of the manor," and a veritable enthusiast in horticultural matters. The flower is very dark, at times almost black; the individual flowers are unusually large, and on one truss fifty-two flowers were counted. The foliage is somewhat small, and the plant in habit is very compact. It appears to promise well.

The cut flower trade in this city is very poor, even for this season of the year; flowers are plenty, especially roses and violets. The bulb trade, however, is unusually good; the principal seedsmen here assures me that he has never before sold so many hyacinths, tulips and lilies. Parties from some other cities have been consigning bulbs to auction houses here, but there appears to be a disposition amongst us to boycott such business. At the last sale announced there was not a florist present; the sale was indefinitely postponed, and the bulbs are still at the auction rooms. A. W. M.

Baltimore, Md.

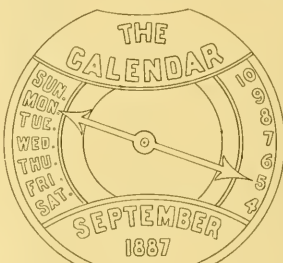
#### The Calendar.

The calendar as arranged this year at South Park was entirely different from that of last season, as will be seen by the accompanying sketch of the plan as arranged for this season. The days of the week and the title at the top were permanent and were not changed during the summer, and the figures representing the days of the month were changed but once a week, the new arrangement obviating the necessity of as frequent changes as was the case last year. The days of the week and the figures on opposite side were lettered in *cheverias* on a ground of *oxalis*, the month in *Alternanthera aurea nana* and the title at top in *Alternanthera paronychioides* major. The pointer swung on a pivot in the center and was supported at each end by a semi-circular iron rod which kept it from brushing the center field of *Sedum acre*. The pointer was planted with *cheverias* with a line of *E. sanguinea* along the center, while a single *E. metallica* did duty over the pivot. The days and figures were separated from the center field by a line of *Alternanthera aurea nana* and a border of the same surrounded the whole bed. The bed was remarkably effective, and is another evidence of the originality of Superintendent Kanst who designed it.

Much has been said against "these artificial monstrosities" but when the colors are judiciously placed the effect is certainly pleasing and that they at once attract the attention of the most indifferent passer by can not be gainsaid; this is verified by the crowds which visit South Park daily and make the fancy bedding their objective point.

#### Greenhouse Embellishment.

At the South park, Chicago, greenhouses the rooted cuttings of *alternantheras* are potted three in a 2½-inch pot, and at this early season make quite a





THE MOUND, DREXEL BOULEVARD, CHICAGO; VIEW FROM THE SOUTH.

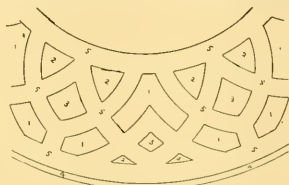
potful. Ordinarily these are placed in blocks, each kind by itself, but this season the different varieties have been arranged on the benches in a variety of pretty designs. The effect on all visitors is at once noticeable; what would have been a plain, flat carpet of color is changed to a very attractive piece of mosaic bedding, and the usual remark is: "Why, we can have fancy beds in winter as well as summer."

It will pay those florists whose customers visit their greenhouses to bear such little points as these in mind. Make your greenhouses as attractive as possible. It pays, as it brings your wares before the purchaser in a more attractive manner and excites a desire for possession. Make as pretty a combination as you can in your show house, and change it frequently, so that your customers will see something different on a succeeding visit. The arrangement of the goods in a store show window is considered a most important matter by the merchant, and he frequently pays a large salary to one who is specially competent in this work. The principle is just the same in our business, and the matter is just as important. The beauties of any plant may be greatly enhanced by suitable combination with others, and we should certainly aim to display our goods to the very best advantage.

LYNN, MASS.—A flower and fruit show was held Oct. 10 and 11 under the management of the Glenmere Odd Fellows.

#### Chicago Parks.

The engraving on this page gives a view of "The Mound" on Drexel boulevard, looking from the south. This mound is thirty feet in diameter at the base and the apex rises to a height of sixteen feet; it contained as planted this year quite 30,000 plants. The horse is made of *echeverias* on a ground of *Sedum* acre; the lower portion was handsomely planted in a fancy pattern of which we give diagram below showing plants used. The palm at the top is *Chamærops filamentosa*. The contrast in the colors of the plants in the lower part was excellent and did much to make the whole a very effective piece of work. We shall show other views of this mound in future issues.



KEY TO DIAGRAM.

1. *Alternanthera paronychioides* major.
2. Variegated sweet alyssum.
3. *Alter. versicolor*.
4. *Oxalis tropæoloides*.
5. *Alter. aurea nana*.

#### Pennsylvania Horticultural Society.

At the recent annual exhibition first premiums were awarded as follows:

Twenty-five ornamental plants, for florists, Small & Co.; 25 ornamental plants, for gardeners, Wm. Joyce, gardener to Miss Baldwin; 12 gloxinias, H. A. Dreer; 12 tuberous rooted begonias, H. A. Dreer; collection of 15 decorative plants, Wm. Joyce; 6 ornamental foliage plants, Wm. Joyce; specimen plants, divided between John M. Hughes, gardener to George W. Childs, and David Emery, gardener to Mr. Dissell; 12 crotons, Wm. Jamison; 25 palms, H. A. Dreer; 12 caladiums, John M. Hughes; 25 varieties of ferns, C. D. Ball; lycopodiums and selaginellas, Wm. Joyce; 6 varieties of marantias, Small & Co.; 6 varieties of dracaenas, David Emery; collection of orchids, E. D. Sturdevant. Cut flowers—General collection, Allen Barr, gardener to Wistar Brown of Villanova; 12 varieties of perennial pilox, H. A. Dreer; 12 varieties of verbenas, H. A. Dreer; 24 varieties of dahlias, H. A. Dreer; 12 varieties of petunias, H. A. Dreer. Roses—Six *Perle des Jardins*, Evans & Battles; 6 *Niphetos*, Craig & Bro.; 6 *Brides*, Craig & Bro.; 6 *Bennetts*, Craig & Bro.; 6 *Comtesse de Fougereuse*, Craig & Bro.; 6 *Papa Gontiers*, W. W. Coles of Lansdowne; 6 *Sunsets*, W. W. Coles; 6 *American Beauties*, W. K. Harris; 6 *La France*, Evans & Battles; 6 *Madame Cusins*, Craig & Bro.; 6 *Bon Silenes*, W. W. Coles; 6 *Catharine Mermetts*, Evans & Battles; 6 *Puritans*, Craig & Bro.; *New rose*, Mrs. John Laing, Evans & Battles. Miscellaneous collection of ferns, Miss A. Bisset, collection of cacti, A. Blanc; collection of plants, David Emery; *Amaryllis belladonna*, H. C. Sheaffer; collection of plants, Small & Co.; case of exotics, Small & Co.; collection of tuberous-rooted begonias, H. A. Dreer; ferns, J. M. Hughes; orchid blooms, Siebrecht & Wadley of New York. Design of cut flowers, Fennock Bros.; table design, Craig & Bro.; basket of cut flowers, Evans & Battles; hand bouquets, John Dick, Jr.; bridal bouquets, John Dick, Jr.; plateau of cut flowers, La Roche & Stahl; funeral design, W. H. Wyatt; wreath of flowers, John Dick, Jr.; cross of flowers, John Dick, Jr.; crown, W. H. Wyatt; funeral design (special premium), H. C. Sheaffer.





Her Majesty.

Reg. (p. 111) asks me for a report of the trial of Her Majesty, in reply to which I would say that the house of Her Majesty which I had under trial last season was not a success so far as the number of blooms was concerned; but not wishing to condemn a thing without giving it a fair trial, I am trying it under different kinds of treatment for the coming season, as the variety undoubtedly possesses merit. Notwithstanding that some writers condemn it as a coarse rose, I myself consider it a really beautiful rose, and moreover, it has the most beautiful foliage of any rose with which I am acquainted. Although it may never become a popular variety for forcing, I am inclined to think it may prove itself much better than it has hitherto done in the open air, judging from several reports I have received from customers to whom I have shipped it, and who tried it in the open air. Before we pass final judgment upon it, we ought to give it a chance to become acclimated; we often discard a rose before fully testing its merits. The Papa Contier is an instance of this kind; I had it when first sent out new, as did several others to my knowledge, and we all discarded it as of no value, except Mr. John Henderson, who was better impressed with it than others, and retained it for future trial, with the result now so well known, and experience teaches me that I have often been too hasty in discarding varieties in the Past.

Another instance of the importance of keeping a newly imported rose long enough to thoroughly acclimate it, was in the case of Catherine Mermet. When I first imported this rose I grew the plants on into fine plants, and did not get more than two blooms from any one plant for the first year, but they were such superb blooms that I felt sure it would do better in the near future; the result surpassed my own expectations the second year. J. N. MAY.

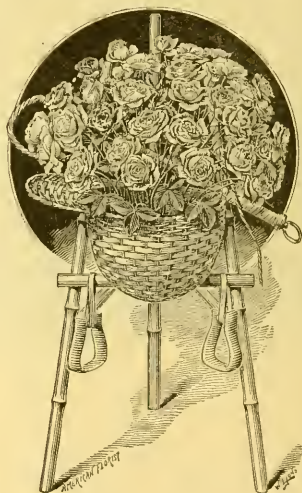
Summit, N. J.

#### Pruning Roses.

Your correspondent Aug. S. (p. 111) of the FLORIST asks for some information on this point, and states that hybrid roses which are pruned will not bloom as early as those which are not. I think your correspondent is slightly in error here (at least for certain seasons of the year). On referring to my note book for last season I find we pruned our first lot of Jacqueminots, etc., between the 2d and 6th of October and left them standing in open air till the 14th, then housed them and started with a night temperature of 45°, gradually increasing the same till we reached 56°, just before they came into bloom. On the 18th of November the first bloom was cut—forty-five days from starting to prune—but the main crop was not in till the 10th of December, or about nine weeks from date of pruning. This was really earlier than we wanted them but the fall of 1886 was very mild for sometime after January, and the plants

being extra well ripened, they started into growth immediately and continued without the least check. I think it would puzzle Aug. S. S. to produce roses from any unpruned plants at that season of the year in less than forty-five days from time of starting, and there is also another side to the question, that is the number of blooms which can be produced by the different methods, and I think if Aug. S. S. tries both, he will find it profitable to prune freely providing the plants are well prepared beforehand. To make myself more clearly understood I will give my mode of treatment in detail which very materially differs from that of your correspondent.

I prefer young plants rooted in February or March and grown on till they get into a six or seven inch pot but not encouraged to make big strong shoots. I very much prefer to have medium sized



JOCKEY BASKET

shoots the size of a lead pencil or some smaller by the first week in August; we begin to ripen these off by withholding water and gradually continue doing so till we make these shoots for about half their length nearly as hard as an ordinary lead pencil; at pruning time they are cut back till we get a good sound eye and where the pith is very small in the shoot. If there happens to be any extra strong shoots which had started later and consequently do not get so well ripened these we cut nearly or quite all away according to their condition; in the older plants where they naturally make large strong shoots we always cut back to good hard solid wood and for some years we have never had cause to complain of the result. One thing is quite certain, if pruning is done at all, the soft unripened shoots must be cut away or they will only break into strong growth and take all the strength of the plants and the result will be no bloom.

Aug. S. S. says also that to obtain better results he thinks we "ought to prune earlier, even during the growing season the strongest shoots should be pinched back." There is no objection to pinching the strong shoots, providing it is done

very early in the season so that the lateral shoots it produces become well matured before the fall pruning commences; but this pinching back is liable to be attended with results the reverse of satisfactory if not done with considerable care and judgment, as the lower eyes are very apt to get started into growth and by doing so the chance of flowers from that shoot are very slim for that season. I very much prefer to let every shoot grow right along from the time it starts and then in the fall or winter—according to the time bloom is required—prune each and all as circumstances require.

For later crops of hybrids the drying off process is not so much a necessity as the early frost will generally finish the ripening process, though even for these it is as well not to let all the heavy fall rains and early winter snows fall indiscriminately on them, particularly in their dormant state; here again, in houses planted on the soil or bed plan, I always cut back freely and cut away entirely any soft pithy wood which may have been produced too late in the season to get thoroughly ripened, or hardened off as it is usually termed.

I never prune the tea rose except to cut the buds and get what cuttings I require for stock, till I prune it to the rubbish heap or fire; that is for one year old plants. When carrying them over a second season after a period of rest, the small weak and blind shoots are thinned out and the others slightly shortened back; this is the first, last and only pruning I ever give a tea rose. J. N. MAY

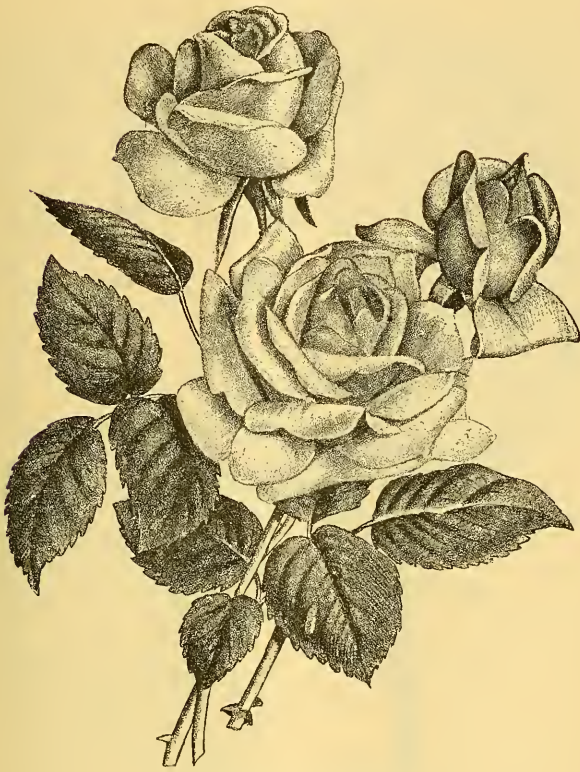
#### The Jockey Basket.

The cap, whip and spurs rest on an easel of bamboo. They are made of basket work. Only the cap is filled with large roses. Pains should be taken not to destroy the contour of the design.

#### The Manetti as a Stock for Tea Roses.

Mr. Henderson's article in your last issue brings to the front again the desirability of using the Manetti as a stock upon which to work tea roses. If a healthy, vigorous plant is wanted for permanent use, either for pot purposes or bench planting, then I answer most emphatically that in my experience with the Manetti I have found it anything but satisfactory as a stock where tea roses are desired to last at least twelve to fifteen months. In February, 1886, we grafted the new tea roses of that year, notably Countess Frigneuse, Marquis Vivens and others; these, I will admit, made a strong, vigorous growth for the first six months after the union was effected, but from that time on they began to decline in health and vigor, and an examination of the point where the stock and scion joined showed a warty excrescence or growth; and as Mr. Henry Bennett stated at the Chicago meeting, the tendency of tea roses on the Manetti is to slough off easily, either by a touch or in syringing.

If Mr. Henderson simply wishes to use the Manetti to procure a strong growth on his Perles, Sunsets, Mermetts and other tea varieties from which to propagate, then I grant that for a limited period it will produce fair results; but I have very serious doubts, judging by past experience with the Manetti, as to its continuing to so act for a period covering more than twelve or fifteen months. Mr. Henderson can speak definitely on this point after his winter's experience, and I for one shall be pleased to know the result. I have no pet theory to defend or



NEW ROSE, PRINCESS BEATRICE

maintain against actual facts, and I shall welcome the result, whichever it may be. It is not claimed by Mr. H. that grafted roses have any advantage over those on their own roots, providing the healthfulness of the plants is the same in both cases; then the question resolves itself into one of dollars and cents; which plan is cheaper—to grow the Manetti in the open ground for a year, pot it and then graft it, as Mr. H. indicates that he does, or simply grow the young tea rose in the open ground for a year, at the end of which time the own-root plant and the graft are of about equal value—if we simply consider the actual work bestowed—for propagating purposes or for winter bloom. I am sure that the own-root plants thus treated will produce as fine growth and as healthy cuttings as grafted roses will, I care not on what stocks they may be worked; then time and the work incident to grafting are saved, which is something; but we attain—what my experience says cannot be done with tea roses worked on the Manetti—longevity. Not a few of the larger growers send roses south to be grown for a season, and it is marvelous what a change climate and soil works in the roses grown in the Carolinas or the Gulf states. Thus roses on their own roots can be resuscitated and reinvigorated by a change of climate and soil in a single season's time.

About the Manetti communicating black spot to the varieties worked on it; I am so strongly confirmed that it does thus contaminate certain varieties—especially the hybrid tea section—that I should be very loath to have stock of that character in a forcing or flowering house. Strong and vigorous growing as the Manetti is, we all know that it is one of the first to shed its leaves with the so-called black spot; I should think that prudence would caution against using any rose for a stock which showed such marked weakness in succumbing to this disease as does the Manetti. I grant that grafted Perles and Sunsets will succeed and continue to do well for a longer period than some of the less robust teas, but to say that they will *continue* thus to thrive (unless they are planted deep enough to form roots of their own) is contrary to the expressed views of not a few of the leading rosarians in Europe.

The candor and earnestness exhibited in Mr. Henderson's article are pleasing, and I hope that some of us younger members of the craft may be possessed by the same spirit, and that whatever opinion we may feel called upon to defend, if the facts are against us we may seek to emulate the same love for truth and correct knowledge that Mr. H. exhibits in his discussion of this subject. I think we can all testify to the great good

Mr. Henderson has done the craft by his pen and voice, and what an inspiration he is to us younger members of the profession who had the pleasure of meeting him at the annual meetings of our society. No subject so uninteresting but that he gave his presence and attention at every meeting; and when he believes a thing, he has the courage to maintain it, as witness the admirably written article in the last issue. E. G. HILL.

#### New Rose, Princess Beatrice.

In complying with your request for a brief statement of the worth and value of Mr. Bennett's new rose Princess Beatrice, I do so with some hesitancy, fearful lest I should over-estimate its value on the one hand and not forgetting that on the other side there is danger of not doing the rose justice. In view of the very pronounced opinion of its raiser, concerning its good qualities, and the high character Mr. Bennett assigns it, I have had great expectations concerning it. Of course the value of a rose in this country depends on its raiser's being able to answer the ever pertinent question "is it a good rose for winter?" Mr. B. answers that it is, and in a measure I can confirm his statement, for the rose is certainly very free in growth, and the buds terminate the ends of every new shoot. The growth is intermediate between Madame Welche and old Devoniensis, with a very dark veinous red cast to the new growth. The bud is similar in shape and build to the old Laurette but invariably longer and larger. The color to be brief is cream white, with deep apricot center and shadings, deepening to a rich golden apricot when open, with an occasional deviation to a pinkish hue.

It is impossible to say now at this writing how it will act in mid-winter but the appearance and conduct of the rose the past month goes to strengthen the belief that it will prove all its raiser's claims. We believe Princess Beatrice will take its place among the better class of tea roses and that it will be much sought after on account of its color. It is strong in growth, free in bloom, and sweetly scented. We hear favorable reports of it from Philadelphia and other places. Mr. W. K. Harris has it in good shape. Let us hear from him regarding its worth. E. G. HILL.

[The illustration is reproduced from the *Deutsche Rosen Zeitung* which in its description gives the rose a very high character, and can not apparently find sufficient words of praise for it. The editor states that his opinions are formed from observation of a large number of plants at the establishment of Schultheis Bros. at Steinfurth, and predicts a bright future for the rose, both for forcing and pot culture.—ED. A. F.]

ROSES.—Will someone tell us through the *FLORIST* what is the trouble with our roses? Since bedding them some weeks ago, we find a dead one every few days, and right at the surface of the ground we find the bark removed clear around the stem; the wood is not cut any. We have looked and looked but fail to find the animal that barks them, and wondered if it could be anything in the soil that made the trouble. Most of the plants are growing finely. KEMBLE F. & S. Co. Oskaloosa, Ia.

THE HORTICULTURAL ART JOURNAL and this paper one year for \$3; which is the publishers' price for the *Art Journal* alone,





The Cyripedium.

BY J. W. A. MANDA.

Viewed horticulturally, there is not a class of plants that can compare with this one, as it includes all the good qualities for which plants are prized either by amateurs or professional gardeners. The beautiful foliage would in itself repay the grower, as some of the kinds, such as *C. Hookeri*, *C. Dayanum*, *C. Lawrenceanum* and others, are so finely variegated or mottled that we have nothing among fancy foliage plants to compare with them. And as to the flower itself, the odd shape, the great variety in color and the variable structure of the slipper are sure to interest greatly any lover of plants. As the number of species, varieties and hybrids is now over 250, there is surely in such a variety—from the small and dainty *C. Parviflorum* to the showy and large *C. Lawrenceanum*, and from the neat *C. Schlimii* and *C. Pearcei* to the noble *C. grande* and *C. Schroderei*, enough to suit all tastes. If some of the kinds have not large flowers nor bright colors, yet they are all pretty and worthy of a place in any collection.

The flowering season extends through the whole year, which is another good recommendation, as we find few single genera that would furnish flowers the whole year round. But the chief merit is the lasting qualities of the flower. Cyripeds are unlike some of the cacti, which to see in bloom you have to sit up a part of the night. When you get a nice lady slipper in bloom you may write to your friend in Europe to come and see it, and he will have plenty of time to cross the Atlantic and find the blossoms just as fresh as they were when you wrote your invitation. These plants are also of easy culture, do not require much room, and if well grown rapidly increase in value. They are valuable, therefore, not only for private people, but equally so for those that grow plants for profit. I do not want to say that everybody should grow cyripeds to the exclusion of other things, but where there is a collection of orchids or other plants in general, this genus should certainly be represented by some of its members.

Botanic Gardens, Cambridge, Mass.

#### Cyripedium Caudatum.

This remarkable plant was originally introduced from the mountain regions of Peru, where it is said to inhabit boggy places, but under cultivation it appears to enjoy strong heat, or at least the warm end of an intermediate house. It has somewhat erect, ligulate, light, shining green leaves, arranged in a two-ranked fashion (distichous). The scape is erect, and bears from two to three flowers; the dorsal sepal, as also the connate lower sepals, are broad, nearly six inches long, tawny yellow, streaked with brown; the petals are narrow, lengthened out into tail-like appendages, reaching to a length of some two or three feet. I have never grown them, however, much over two

feet, although I have been frequently assured that they do attain to thirty and thirty-six inches in length. These tail-like appendages are nearly of the same color as that of the sepals, but become darker towards the tips, and are not fully developed until several days after the flower opens; the slipper-like lip is oblong, yellowish white, tinged with green and streaked with brown; in the variety *roseum* it is beautifully suffused with a dark rose color. The flowers open dur-



CYRIPEDIUM CAUDATUM.

ing the months of April and May, and if kept from damp, last several weeks in perfection.—*E. C.*, in *London Garden*.

#### English vs. Latin Names for Plants.

The editor of the *London Garden* strongly recommends the use of English names by English speaking people wherever possible and deprecates the use of botanical names for any purpose other than international reference. He suggests that English names be given those plants which at present have none, and expresses the belief that the Americans will assist in establishing such a nomenclature.

The change would certainly be a radical one, but that it would have the effect of bringing into closer relations with horticulture many who now stand aloof, there can be but little doubt. The great objection to popular names as now used is that they vary greatly in different localities and the botanical name is the only one which can positively be relied upon, but this can be overcome by the

establishment of a standard which shall be as authoritative as the botanical one now in use. The true American is nothing if not practical, and in addition greatly appreciates brevity; therefore any practical change which will shorten the names now in use would undoubtedly be quickly accepted. The characteristic above noted has here resulted in the establishment of a vernacular wherein the names of our leading roses are most ingeniously abbreviated. *Perles*, *Niph's*, *Souv's*, *Bon's*, *Saf's* and *Dukes*, are used as abbreviations of *Perle des Jardins*, *Niphetos*, *Souvenir d'un Ami*, *Bon Silene*, *Safrano* and *Duke of Connaught*; and many other names are abbreviated in the same manner. If we are to have new names, let them be as short as possible, that the necessity for abbreviation may be reduced to the minimum.

#### Horticultural Exhibitions.

BY JOHN THORPE.

Perhaps no subject is more rife with interest than is this of horticultural exhibitions; the importance of exhibitions, whether they pay directly or not, cannot be gainsaid. As Mr. Ball says in his very excellent paper, "it seems impossible to attract enough paid admissions to make a financial success, and exhibitions do not receive the patronage they deserve by the wealthy classes."

I have been so much interested in horticultural exhibitions for the past twenty-five years, and have so keenly watched their ups and downs, that I feel entitled to say a few words about the past and the outlook for the future. In the long past there seemed to be more appreciation, even among the general public, of really fine specimens than there is today. I mean that it mattered not how a fine specimen was staged, if the specimen was worth admiring, and the public came to see them. I well remember at a very large exhibition where a fine collection of heaths were shown, the plants were carried out of the groups and isolated, so that individuality could be observed. I also remember that the plants were dropped here and there without reference to effectiveness in staging, and that they were the lions of the show, in spite of other exceedingly fine plants of all kinds being grouped for effect. Exhibitions must be considered from two extreme points. The hard and fast student of horticulture, trained to grow and love fine specimens, cares little for effect, providing the individual specimen or specimens are perfect and they are named correctly; neither does the plodding amateur, who is desirous of obtaining hard facts in cultivation. On the other hand is the fancier, who sees but little in individuality compared with what can be seen and made in tastefully arranged groups and exhibits. The question arises: Which is right? The general public, the sight-seers are attracted, not as a rule by their knowledge of horticulture, but by their being made to believe, either by advertisements or other attractive methods, that they can get more for the price they pay for admission than they ever got before.

Horticultural exhibitions have been unfortunately limited to only a few days' duration. To make such exhibitions entails nearly half as much more expense than do exhibitions of either inanimate objects or amusement entertainments—from the perishable nature of the articles used; besides in large communities the public—that is, the masses—cannot make it convenient to attend such exhibitions



when they are only of a few days' duration. But supposing that one or two exhibitions could be held each year, continuing over a month, with new attractions three or four times a week, and the same liberally advertised; then I think exhibitions could be made to pay.

The arrangement of exhibitions is of vital importance, but as there is no rule, where the same arrangements would apply to all, it must be left to those who have the arrangement matter in hand. There is no doubt, however, that there are certain positions where certain plants are at home, and vice versa. All large plants should not be placed on the floor, any more than that all small plants should be placed on tables. I was particularly struck with the fascinating position of Mr. Hughes' large *latania* at the late show in Philadelphia, placed as it was on a pedestal, where beneath its perfect spreading leaves one could walk and imagine they were at home with nature, in spite of the tub in which the plants grew being in sight. If Mr. Ball had staged one of his fine *gleichenias* in the same way, it would have been objectionable and out of position. There are a few plants which can be placed anywhere seemingly without being out of place; on the other hand, unless certain plants have suitable places they never look well.

Such plants as the arching forms of low-growing ferns are seen to best advantage on the ground; the dwarf forms of *davallias* and the rhizome rooting ferns are best at the line of sight; whereas such as the epiphytal-like *nephrolepis* and *goniophlebium* would be best suspended eight or ten feet high. Such flowering plants as geraniums are best seen to advantage on the floor, but tuberous begonias want to be seen at the line of sight, while fuchsias show their elegant growth and prim outlines when one can look up to them.

I have often thought over whether it would be best to make it an object to entirely hide the pot, tub, or whatever receptacle the plant is in, and have come to this conclusion, that unless it is possible to entirely obliterate artificial cultivation from appearing in either exhibitions or decorations, let us tolerate the conventional pot or tub, and recognize it as a factor in our business, just as much as we have to allow that an engine is necessary to pull a train of cars along the rails. Then as to naming: All plants exhibited purely in the interest of horticulture cannot be too legibly or distinctly labeled, whereas on the other hand, plants arranged solely for effect would be spoiled if large and conspicuous labels were exposed to view. So, as Mr. Ball says, how to have an entirely successful exhibition is still the question.

IN THE COLLECTION of cut flowers exhibited by Wm. Falconer at the recent Mineola fair, 105 genera of plants were represented, also several species of some of the genera, and many varieties of some of the species.

#### *Nephrolepis Rufescens Tripinnatifida.*

In spite of its long name this may be considered as one of the very handsomest ferns, vieing with *Adiantum Farleyense* in gracefulness and effect. The fronds in very large specimens are from two to three feet high, slightly arching, plummy, and very wavy in outline. The stripes are of a russet brown covered with a red woolly coat. The pinnae are much cut and divided especially as they reach the extremity of the fronds. The aspect of the plant in all styles is gracefulness itself, and when grown in baskets for suspension no more lovely object can be imagined. It will be very useful for cutting purposes, and mature fronds will wear as well as any of the forms of *N. rufescens*.

The plant was shown at the Mass. Hort. society exhibition Sept. 13 by Mr. Martin, who also showed another new fern—*Lomaria Gibba platyptera* which must become a very useful trade fern.

JOHN THORPE.

#### Care of Frames for Hotbeds Over Winter.

Preparations should be made now for hotbeds to be used next spring. At the frame yard in Lincoln park, Chicago, the old soil and manure have all been removed, and the whole yard, not only in the frames but the walks between, covered with a layer of leaves a foot deep. This is to keep the frost out of the ground as much as possible during the winter, so that everything can be easily and quickly arranged in the spring when the frames are needed for hotbeds. As winter advances the frames will be covered with shutters to keep out ice and snow. A little attention paid to this important matter now will save considerable hard labor and undesirable delay in early spring.

Those florists who grow bedding plants and who have as yet but little frame room, should prepare now for an increased surface. Not only is their value great for relieving the overcrowded greenhouses in early spring, but plants which spend part of their growing season in them are much more stocky, and will give far better satisfaction when bedded. This is especially noticeable with geraniums, and we hope that those florists who have been growing those "long drawn out" specimens, will adopt this method of growing them, and have for sale the coming spring plants which have less length of leaf stem and more vitality.

RAIN WATER.—Every florist knows how important is a supply of rain or soft water; its value can hardly be over-estimated. This is secured at a little cost and in a simple manner at D. S. Heffron's place at Washington Heights, Ill. by the following method: From a cistern which receives all the roof water a cut off is run to the well; which, when the water reaches it carries all surplus directly to the hard water making a mixture which is almost all that could be desired. The cut-off being placed some distance from the bottom of the cistern always leaves a supply of the pure rain water for special use.

AMERICAN BEAUTY.—I planted a lot of American Beauties out-doors this summer from a bed in the greenhouse; also Bennetts, and they have both been in flower the whole season, and lately they have produced some superb blooms.

M.





## Seasonable Notes.

Now is the winter of our discontent made happy by the glorious display, if we have done our duty the past eleven months.

A very important matter is now to attend to the labeling of all varieties while in flower. Note all the most desirable kinds as they open—remembering to mark for what purpose they are most desirable, whether for cut flowers, specimens, or simply for decoration. If any standard variety happens not to be in good condition this season don't discard it, as I have frequently noticed that chrysanthemums have their seasons of disasters and success as do roses and other plants.

Bear in mind to visit as many exhibitions as possible, note book in hand, and jot down the best. J. THORPE.

Plant Notes by Wm. Falconer, Long Island, N. Y.

THE MARGUERITE LEAF-MINER has appeared in this neighborhood.

SNAPDRAGONS sown June 24 have been in good bloom since a month.

WHITE CANDYTUFT sown out of doors July 22 is now and has been for some weeks in capital bloom.

GLOXINIAS.—Have just harvested the "roots." One-year-old tubers from frames are as big as two-year-olds from pots.

HELIOTROPUM INCANUM is a very strong-growing hoary-leaved plant, but so sparsely bloomed as to be not worth growing for its flowers.

DOUBLE SWEET ALYSSUM for cuttings in June and planted out end of July are now as white as snow and far fresher than the early plantings.

THE JAPANESE ANEMONES were in most lovely perfection till the 15th inst., when a couple of degrees of frost completely marred their flowers.

GOLDEN BEDDER is a magnificent full double yellow dahlia of low or spreading habit, and which blossoms in the greatest profusion. The flowers are of large size.

ZEBRA ZINNIAS.—At Mineola the other day C. L. Allen & Co. showed a capital strain of these. The old gentleman has recently recovered from a severe illness, but still looks haggard.

CHRYSANTHEMUM SEGETUM GRANDIFLORUM has bloomed uninterruptedly since last June, and is now one of the brightest yellow-flowering plants in our garden; at the same time it is only a weed, and has established itself as such.

THE MELON PEAR.—If the introducers had sent out this plant as a "flowering" plant we mightn't feel so bad about it, for it grows very thriftily and yields bluish purple potato-like blossoms in the greatest profusion. But the "melon pears," where are they?

OF HELIANTHUS MULTIFLORUS, single and double, lift a few clumps and winter them in a cold frame, or if you wish to

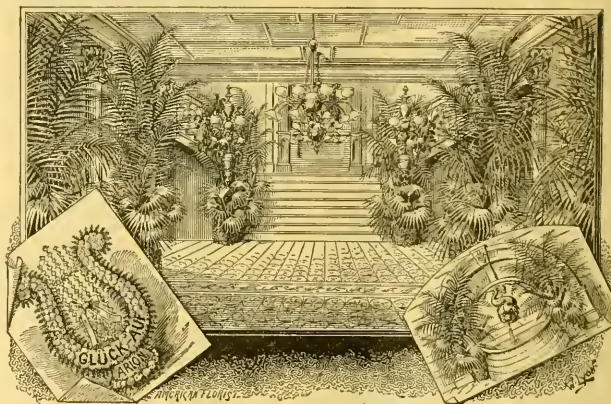
have stock for early shipping plant them close together on benches in a cool house. Then you can secure the green sprouts and pot them singly.

DESMODIUM PENDULIFLORUM was in finest bloom from the 20th of August till the 20th of September. About this time D. p. album began to bloom, and kept in bloom till the 10th of October. It differs so much in habit, general appearance and time of blooming from the D. penduliflorum that I am more inclined to favor the name D. japonicum, by which it is also known.

POLYGONUM AMPLEXICAULE VAR. OXYPHYLLUM is one of the grandest hardy herbaceous perennial plants of any season of the year. Its flowers are

in our summer gardens. Restricted to pot culture and headed back, it has in two years from seed formed a bushy plant ten feet high with me, and is well furnished with foliage as large as the leaves on young shoots of Paulonia imperialis.

CANNAS.—If you have some choice kinds that you wish to get up a big stock of, don't lift, dry and store them past on dry shelves, but break them up and plant them out near together in a warm frame. But if you haven't got convenience, set them on earth beds under the stages or on the benches. Many kinds of cannas, flaccida and Ehemannii, for instance, don't keep well if wintered kiln-dry on a shelf, but keep admirably when laid on a slightly moist earth surface.



PLANT DECORATION AT ARION CLUB HOUSE, NEW YORK.

white, fleecy-like and in ample terminal paniced racemes, and they are deliciously fragrant. The flowers began to open about the 25th of September, and were in their most beautiful condition about the 8th of October. On the 15th of October a sharp frost marred them considerably.

MAXIMILIAN'S SUNFLOWER is now in its fullest perfection, seven to nine feet high. The stems, for some two to three feet, are terminated by bright yellow flowers, which are most acceptable at this season of the year, when all the other perennial species are done blooming. It is hardly enough with me, but many regard it as of uncertain hardiness. But a heavy mulching should save it, anyway.

SLUGS AND SNAILS.—Take your lantern and go out into your greenhouses at night and look for these voracious pests. There is no other way by which you can keep them in subjection. They are fearfully destructive on orchids. They eat the young roots, the young growths, the flowers, and often cut off the flower spike near its base. A little cotton wadding tied around the flower spike prevents their ascent to the blooms.

THE "TREE TOMATO OF JAMAICA," so far as its "tomato" yielding propensities are concerned, had better stay in Jamaica; but as a bold, handsome, tropical-appearing plant, it is well worth a place

COREOPSIS—A STERILE HYBRID.—Among my annual coreopsis I have a hybrid exactly intermediate between C. coronata and C. Drummondii. While we were admiring it the other day, Mr. Nicholas Hallock, with his usual eye to business, began to hunt for seed, but curious enough, although the plant was large and full of flowers, there was not a seed upon it, while near by plants of the parent species were full of seed. But it isn't an improvement enough on either parent to warrant me in perpetuating it.

SALVIA.—A couple of degrees of frost have destroyed S. splendens and its varieties, also S. acalifolia, S. ianthia, S. nigricans and S. coccinea. But the fragrant S. rutilans does not seem hurt at all; it is now in full and beautiful bloom. S. Greggii, a red-flowering Texas species, is also in good bloom and not a bit hurt. S. Pitcheri is the best of all the blue salvias, now in its prime and uninjured. S. farinosa, lavender-blue, is likewise very profuse and uninjured by the frost. This last species blooms all summer long, is almost hardy, and its self-sown seedlings come up thickly in spring around where the old plants grow.

THE VIOLET DISEASE does not prey as severely on the Czar as on the Marie Louise violets. Some choice forms of the common wild violet (V. cullata) I have are also affected by it, but not ruinously so. Apropos of Mr. Hammond's remarks



(p. 85), I would say that last winter I got some absolutely clean plants and isolated them from my other stock. In spring I broke them up into small pieces, potted these singly and summered them plunged in a bed of ashes under the shade of a wild cherry tree against the north side of a building. They kept nice and healthy and looked first-rate till August, when the unconquerable disease displayed itself among them, but at the same time not nearly so bad as among my other violets elsewhere. Mr. D. S. Heffron (p. 92) uses lime and sulphur as a preventive. Three years ago I used both of these, out-doors and in frames, and in every way I thought beneficial, but without any apparent benefit.

#### Plant Decoration at the Arion Club House, New York.

The main view in illustration shows the corridor inside the vestibule or leading from it, which was tastefully grouped with specimen palms as shown. Oak leaves were used to cover the tubs or boxes which held the plants, and the effect was excellent. The stairway was flanked with palms and the electric lamps on each side were shown in beautiful relief from the background of foliage.

The floral lyre on the left-hand side was presented to the society by Hanft Bros. who made this decoration. It was composed of marigolds and zinnias and edged with ferns. The strings were made of tuberose and the lettering was done with dark blue immortelles.

The picture on the right represents a marble fountain at the head of the stairs on the second floor. The fountain was arched very gracefully with plants.

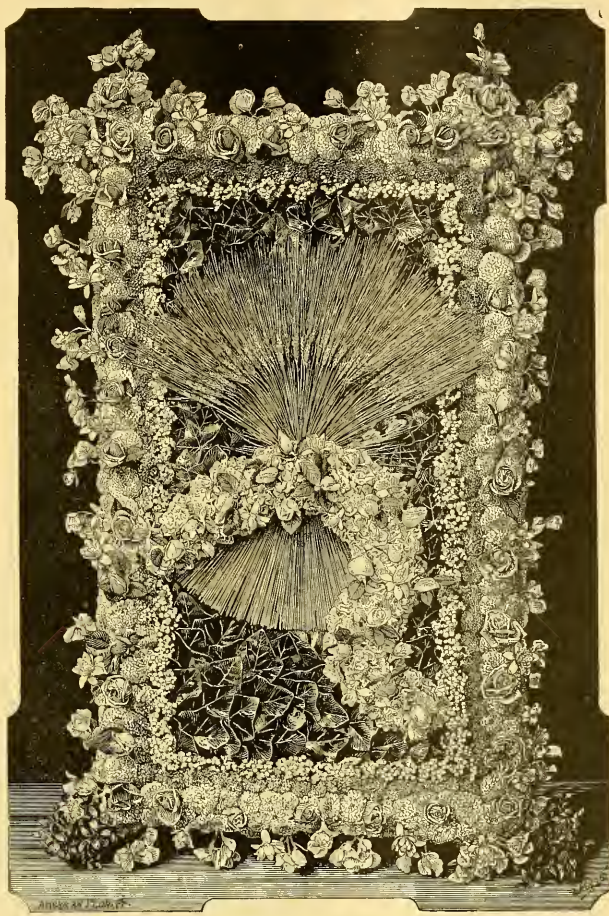
#### Lobelia Cardinalis as a Decorative Plant.

This plant could not be used to good advantage for cut flowers except where long spikes of bloom are required, but it is not often we get more brilliant colors, and as it can be kept in good condition nearly or quite a month. I think there are places in which it could be made very effective in decoration. Well-grown plants give spikes a foot or more in length, and eight inches of bloom open at one time. This color and form of spike are best displayed projected above and among a mass of green. I have some fine specimens in 5 and 6-inch pots on the northeast side of a building, and find it does much better in such a place than in an exposed situation. Old plants throw out several offsets at the base of each stalk, which may be taken off late in autumn and grown in quite small pots under the benches through the winter, or seed may be sown soon as ripe, and if kept rather wet in a moist, shady place (under the benches is as good as anywhere), it vegetates very readily, although a little slowly. These seedlings may be potted and treated same as offsets, but will not flower till the second year.

New Jersey. WM. F. BASSETT.

#### A Floral Love Story.

A Boston florist tells this interesting story: "Last spring I used to notice a couple going by here—a fine, manly young fellow and a girl pretty and dainty, with lovely brown hair and dark blue eyes. They didn't know each other, but when the young man went to business the girl was sure to be somewhere around where she could see him. She lived right around the corner and she used to come in here and pretend to be examin-



FUNERAL DESIGN.

ing the flowers as he passed. Then she would look up and watch him as he went down the street. One day as he went by she looked up and said to me, 'O what a funny hat!' and then carelessly, as she began picking among the flowers, 'I wonder who he is?' I came very near laughing, for the previous day the young fellow had been in to ask me who she was, and had sent her some flowers. About a week afterward she came in with a friend and I heard her telling the friend how somebody had been sending her flowers every morning and she wished she could find out who it was.

"Well, the best part of it all came afterwards. One morning he came in as usual, and the gardener took him back in the conservatory. While he was there the girl entered and stood near the counter looking toward the window. Presently he returned, and as he started for the door briskly, he said: 'Well, send these flowers as usual up to No. 24 street.' Neither knew the other was near, and hearing the number of the house mentioned, she turned around and they met face to face. Well, I never saw such

an embarrassed couple in all my days. She had a big Jacqueminot near her face, and it would have been hard to tell which was redder, the rose or her cheeks. She turned to the flowers and he passed out. They didn't come any more, but not long ago I saw them going by together. They both looked up, and when they saw me, he laughed and she blushed."

#### Funeral Design.

Our illustration shows a very handsome piece arranged by Mr. F. F. Benthey, a Chicago florist. The excellence of the engraving renders any description wholly unnecessary, as each individual flower can be readily recognized.

THE COSMOS.—At South Park, Chicago, Superintendent Kanst has in bloom several varieties of this pretty flower. He finds they bloom best when the branches are bent down as it induces the side buds to break and a head of bloom usually results. The flowers stand well when cut and it might be of value as a cut flower. The plants are readily grown from seed.



### Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1886.

Nov. 1—Tem., morning 45°, noon, 70°, evening 58°. Wind S. Cleaned white-wash from front and sides of conservatory. Pricked in boxes little echeverias. Laid down and covered for the winter the standard roses. Rearranged plants in Nos. 2, 4 and 6.

2—Tem. 52, 67, 65. S. Continued potting from propagating bed cuttings of geraniums. Prepared pansy bed with fresh soil for early spring use. Laid down half-standard roses.

3—Tem. 46, 59, 50. W. to NW. Continued potting rooted geranium cuttings. 4—Tem. 34, 52, 56. WSW. to S. Continued potting geranium cuttings. Laid down root-grafted roses. Put new compost into one solid pile.

5—Tem. 41, 44, 41. NW. Laid down bed of remontant roses. Turned over rest of last year's compost. Fenced in rose beds.

6—Tem. 25, 41, 37. W. Potted cuttings of bronze and ivy-leaved geraniums. Covered frame yard with leaves. Regular night fireman went on to-night.

7—Tem. 28, 38, 26. N. Sunday.

8—Tem. 24, 42, 40. WSW. Sifted sand for additional propagating bed. Laid down clematis. Covered frames with shutters.

9—Tem. 41, 40, 44. S. Propagated first lot of Mt. of Snow geraniums. Cleaned stock geraniums in No. 7.

10—Tem. 44, 50, 44. S. to NW. Same as yesterday, and cleaned up outside beds for the winter.

11—Tem. 32, 42, 40. NW. to NE. Potted rooted offsets of Echeveria s. g., and placed on top shelf in No. 6. Transplanted heliotropes into 3-inch pots. Fenced in rhododendron beds with shutters for winter protection.

12—Tem. 37, 41, 37. NE. Same as yesterday.

13—Tem. 27, 40, 35. W. Transplanted into 3-inch pots alyssums and trapaeolus, and same as yesterday.

14—Tem. 30, 47, 38. W. Sunday.

15—Tem. 37, 42, 37. NW. Commenced propagating Alternanthera aurea. Fenced hollyhocks for winter protection.

### Shipping Plants by Express.

I noticed an article in the AM. FLORIST of Oct. 1 in regard to packing plants in flat, deep boxes, which Mr. Geo. Buxton says will effect a saving of one-third in express charges over those packed in boxes only six or seven inches deep. I received plants over the same route; 125 carnations, packed in two orange boxes with slats over, about the same depth as the writer suggests; the charges were \$1 per box. Also a small box about 15 x 18 inches and fifteen inches deep, at 80 cents; it contained fifteen plants. I must say the boudvardia was one-third heavier than the pinks. Now, I should like to know where the saving was in regard to packing; the charge is outrageous either way; of course it is better to have them covered over. I should like to hear from other parties.

W. A. BOCK.

**BONES FOR FERTILIZING.**—Bones can be readily prepared for use as a fertilizer by breaking them into small fragments as possible and placing in thin layers in a heap of fermenting manure, having about the same heat as a hotbed. In the course of a few weeks they will become softened when they may be worked over.

M.

### Orders for Future Delivery.

A convenient method of keeping track of orders which are to be delivered at some future time—so necessary in a florist's business—is in use by Frank Whittall & Co., Milwaukee. It consists of a future order-book, of which we give herewith a sample page.

No. 807.	188.
When to be delivered.....	Time goods are wanted.....
Name.....	Name.....
Address.....	Address.....
Article.....	Price.....
.....	" .....
.....	" .....
.....	" .....
.....	" .....
Ship by.....	Charge to.....
Charged on Book No. ....	Folio.....

Articles marked X have been re-ordered of
Remarks.....
.....
.....
.....

The page is perforated through the center, so that the duplicate can be readily detached. The detached orders can be arranged according to dates, while the stub from which it is taken can be readily found in the book by the number. This book is specially valuable for keeping record of orders received in spring for beds of bulbs to be planted the next fall, and orders received during the summer and winter for beds to be planted the following spring.

The frequency with which such orders are received by every florist renders necessary some method for keeping a record of them in such a way as to avoid all chance of error and to provide against being obliged to spend half a day looking through some old note book or hunting for one which has been lost, before the order can be filled. The time usually spent in this way in one season by the man who has no system, would pay for a first-class future order book which would last four or five seasons.

### Hen Manure.

I think Mr. Taplin has greatly overestimated the danger in using hen manure, and in fact the instances he quotes of ill effects from other fertilizers show that the danger comes from careless use or from unusually unfavorable circumstances. Since writing my former article I have carefully weighed, and find that I use for pot plants from  $\frac{1}{4}$  oz. to 1 oz., or rarely for quite large plants of gross-feeding sorts, up to 2 oz. of *dry* hen manure. I would not dare use half as much guano, and I think one-fourth would be more liable to heat. I have also used it in a different manner, placing a very little soil in the bottom of the pot; then the hen manure, and soil enough to prevent contact with the roots, and removing the plant from small pots on top of this. I treated a lot of quite small roses, received in June, in this manner with good success, and also a lot of annuals when transplanted from the seed pots to 3-inch pots. A quantity of celery transplanted from seed box to small pots and to shallow boxes—the latter being prepared by covering the bottom with

soil, then a liberal sprinkling of hen manure and filled up with soil, into which the plants were set. I have also used from 1 to 2 oz. to a plant, in same manner, when transferring to the open ground violets, heliotropes, geraniums, abutilons and quite a variety of plants, all satisfactorily. It may be well to state that

No. 807.	188.
When to be delivered.....	Time goods are wanted.....
Name.....	Name.....
Address.....	Address.....
Article.....	Price.....
.....	" .....
.....	" .....
.....	" .....
.....	" .....
Ship by.....	Charge to.....
Charged on Book No. ....	Folio.....

my land is quite light, and results on heavy land might be different, but as a general rule I think I get as good results to apply without the heavy coat of composting or liquefying; and when I wish to apply a coat of stable manure, I see no reason why it is not just as well to plow it in very early in spring while both soil and manure are moist, and this in effect composes it with no extra cost.

New Jersey. WM. F. BASSETT.

### Chicago.

Henry Penshorn is building a new house 100 x 20.

First snow of the season fell the morning of October 21. A bright sun however soon cleared it away.

Flowers are now retailing as follows: Perles and Niphotos, \$1.50 a dozen; La France and Bennetts, \$2; Mermets, \$1.50 to \$2; American Beauties, \$4; Bon Silenes, 75 cents to \$1; carnations 35 cents; violets 75 cents a bunch of fifty blooms; smilax 50 cents a string.

Preparations for the coming exhibition is occupying the entire attention of the Florist Club. The immense building will be elaborately decorated with wreathing and palm leaves, before the exhibits are placed, which will undoubtedly add much to the general effect. A concert programme will be rendered each afternoon and evening during the exhibition by Chicago's most popular orchestra, and the event is being liberally advertised. Success is practically assured and this will no doubt be but the beginning of annual exhibitions of the kind. A new departure will be to close the exhibition with a reception and ball, retaining sufficient of the plants exhibited to richly decorate the hall. The remarkable success of the reception given by the club last winter, suggested this feature, and it will no doubt add considerably to the total receipts. The combined attractions of flowers, plants, music and the waltz, drew an immense crowd to the reception last winter, though more unfavorable weather could not have been devised, for a sleety rain fell all day and all the night.

## Trade Notes.

OSHKOSH, WIS.—John Wilson is adding three new houses to his place.

STOUC CITY, IA.—Wm. Smith has completed a new carnation house 175 x 50.

PORT CHESTER, N. Y.—Paul J. Borgevin has built a new house 20x25 for smilax.

FOND DU LAC, WIS.—E. Haentze is building three new houses, 72 x 22, 50 x 24 and 50 x 16 respectively.

ANNISTON, ALA.—Mr. C. N. Zingssem the well known landscape artist of New York is superintending some extensive improvements here.

PITTSBURGH.—J. W. Elliott has withdrawn from the B. A. Elliott Co., and has started into business for himself at 8½ Sixth street. He will make a specialty of hardy plants.

MILWAUKEE.—M. P. Dilger is building an additional carnation house 88 x 18. B. Heyden is building two tropical plant houses; one 62 x 10, the other 40 x 50. F. P. Dilger has built three new houses at Bay View containing 6, 100 feet of glass.

TACOMA, WASH. TER.—The exhibit of the Pierce county branch of the Washington Hort. society Oct. 3-6 was very successful. The exhibits of flowers and plants were excellent. A large number of eastern tourists visited the exhibition.

ALLENTOWN, PA.—The floral hall at the annual fair contained a much better display than ever before. The principal exhibitors were A. B. Ellsworth, Ernest Bates, Jesse Lewis, Mrs. Harlacher and Calvin Weiler.

ST. LOUIS.—At the "Great St. Louis Fair" first premiums were awarded to C. Young & Sons for collection greenhouse and hothouse plants, pair hanging baskets, collection ferns, specimen croton and floral designs; to Wm. Schray for collection palms, specimen ficus and collection colored foliage plants arranged to produce greatest contrast; to C. C. Sanders for collection nursery stock.

TOPEKA, KAN.—Bristol Sisters have sold their business to P. M. Pierson of Tarrytown-on-Hudson, N. Y. They will remove to Los Angeles, Cal., where they will join their brother. The cause for the change is the poor health of Miss Emma Bristol, whom many readers of the FLORIST have met at the meetings of the S. A. F. Her many friends in the trade will hear with regret that she has been obliged to sever her active connection with the business she loved so well.

OSKALOOSA, IA.—The Kemble Floral and Seed Co. have completed another new house, 21 x 93. This makes a total of 8,000 feet of glass, all heated by steam. In the last house there are eight runs of 1½-inch pipe, all hung to the rafters, four on each side. The first run is fifteen inches from the foot of the rafter; there is a space of two feet between the two runs above it, which leaves a space of five feet from the top run to the ridge pole. They are much pleased with the new arrangement.

WASHINGTON, D. C.—At a recent reception tendered to Gov. Shepperd the table was decked with ropes of smilax and vases of roses. At the head was a great mound of white carnations fringed with long stemmed dahlias, roses, golden

rod and leaves of the rose geranium. Upon the white surface were lettered the initials "A. R. S." in pink carnations and under them the word "Welcome." A handsome table piece recently made by Freeman was a large oblong basket about three feet in length filled one side solid Perles and the other American Beauties. It was very effective.

NEW BEDFORD, MASS.—A. B. Hathaway has the past summer added about 1,000 feet of new glass in addition to remodeling two old houses. He has also changed all his hot water pipes to the down-hill system in hopes of securing better circulation. Chrysanthemums around here are in general very poor this season, though a few grown by John Driscoll, gardener to Wm. J. Hatch, are very fine—as is everything he grows—some measuring four to five feet across the head. It is not likely that any show will be held this year. F. H. Pasells' carnations are badly diseased; it commenced its ravages while the plants were in the open ground. It will cause a heavy loss, as he makes a specialty of pinks. The farmers have just had their annual fall show, and it was a credit to them. The florists were each given a table, six feet square, to arrange with flowers and plants in any way to be most attractive. Six entered in competition, but no prizes were awarded.

## SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order.

**SITUATION WANTED.**—By young man, thorough knowledge of rose growing and general stock for cut flowers. Good references. Address Box 24, Allegheny City, Pa.

**SITUATION WANTED.**—To grow roses, propagating, designing fancy bedding, house construction, landscaping. Single man; sober, honest and reliable. Address FLORIST, No. 3 Beaver Place, Boston, Mass.

**SITUATION WANTED.**—Gardener; married man; S who has had 15 years practical experience in private and commercial. Neighborhood of Philadelphia preferred. Age 32. Address D. J. care H. A. Dreer, 14 Chestnut St., Phila.

**SITUATION WANTED.**—By single man as rose grower and flower and general stock for cut flowers; has had practical experience. Good reference—will take charge of place. Private or commercial. Address, stating terms and salary, R. F., care American Florist, Chicago.

**SITUATION WANTED.**—By German gardener and florist; 15 years' experience, understands the cut flower trade in all its branches. Specialist on roses. Good floral worker and fancy bedder. Capable to take charge of commercial business or private place. H. B. HIGGINS, P. O. box 167, White Plains, N. Y.

**SITUATION WANTED.**—By a first-class practical gardener, nurseryman and florist; 10 years' experience; 16 years in America, north and south. A thorough, practical man, either private or commercial. A Japanese, orchid and rose grower; understands making designs, etc. English, age 45. Best of references. Address J. P. D., P. O. College Hill, Hamilton Co., Ohio.

**WANTED.**—Every florist in the United States to read our advertisement in this issue. Greatest inducements. SYRACUSE POTTERY, J. Neal Perkins, Manager.

**WANTED.**—Florist; a single man of experience in growing roses and cut flowers. State salary expected. Address FLORIST, 195 W. 4th St., Cincinnati, O.

**WANTED.**—A practical florist who understands general greenhouse work; especially the arrangement of flowers. W. W. GREENE, SON & SAYLES, Watertown, N. Y.

**FOR SALE.**—Five acres of land, two greenhouses 10 x 30, good dwelling, good new barn, two large cisterns, two wells, three force pumps, hose, 15 miles of town of 2000 inhabitants, good trade of flowers and vegetables. Cause for selling, getting old, going south. Address JOHN M. EDMAN, Youngstown, Ohio.

**FOR SALE.**—Two new greenhouses, built 2 years ago, 30 x 100 and 15 x 100 feet, with stock on hand consisting of one house of roses and the other of carnations and chrysanthemums; one acre of land enclosed with board fence. Also 30 tons of coal. Located 15 miles from Chicago on the C. & O. R. R. Have also a good local trade. Will sell for \$2,500, \$500 in cash, balance on time. This is a good chance for an enterprising florist. Address R. H., care American Florist, Chicago.

## OUR SPECIALTIES.

## NOVELTIES IN ROSES

## AND OTHER PLANTS.

— ALSO —

## FLORISTS' STOCK FOR FORCING.

## HILL &amp; CO.,

RICHMOND, IND.

## NOVELTIES IN ROSES.

Also the leading forcing varieties Teas, H. Teas and H. Perpetua, 1,000 large roses in 1 and 2 inch pots; C. Mermet, La France, Sunset, Perles and Bon Silences, at \$2.50 per 100. Chrysanthemums, best varieties, 5 and 6 inch pots, \$15.00 to \$20.00 per 100. Bouvardias, 2½-inch pots, \$5.00 per 100. Gardenia Radicans, @ \$5.00 per 100. Grand Duke Jasmine, @ \$6.00 to \$8.00 per 100. 3,000 American Holly, Hex opaca, @ \$10.00 to \$12.00 per 100. Choicest buds and cut flowers at lowest market prices.

JACOB SCHULZ, LOUISVILLE, KY.

## IMPORTED H. P. ROSES.

Worked low on the Manetta Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagation quickly. Fine plants for sale by the 100 or 1,000, at low rates.

Address

WILLIAM H. SPOONER,

JAMAICA PLAIN, (Boston), MASS.

*Budded Roses for Winter Forcing or Spring Market Sales—H. P. and Teas.*

## SPECIAL OFFER:

The following varieties, equal quantities of each, we sell for \$10.00 per 100.

H. P.—Anna de Diesbach, La France, Gen'l Jacqueminot, Paul Neyron, Queen of Queens, Comtesse of Oxford, Jules Grenadin, Anna Alexiev, Mme. Gabriel Luizet, Mme. Knorr, Marie Baumann, Gloire Lyonnaise, Her Majesty, M. de Lyon, Alfred Colomb.

The following Teas Roses at \$12.00 per 100: Perle des Jardiens, Mme. Lambert, Marie Van Houite, Mme. Talcott, Mme. Charles, Mlle. Francaise Krueger, Duchesse Mathilde, Cornelia Cook.

Catalogue on application: Dormant buds of the new H. P.'s of 1887—Earl of Dufferin, dark, nearly black; Miss Ethel Brownlow, red. The new Teas Rose Lady Helena Stewart, similar to C. Mermet, very free flowering. All at \$3.00 each.

Cyclamen persicum, fine plants in buds which will flower in November, \$8.00 each. American Beauty, Bennett, Faus Knudsen, Niles, in 1-inch pots, 40c each. SCHULTHEIS BROTHERS, P. O. BOX 78, COLLEGE POINT, LONG ISLAND, N. Y.

## E. BENARD,

ORLEANS, FRANCE.

## ROSES ON THEIR OWN ROOTS

A SPECIALTY.

## NURSERY STOCK OF ALL DESCRIPTIONS.

For particulars apply to

E. BENARD, JR., NILES, CAL.

## JACQUEMINOT ROSES

One year, fine, 2 to 2½ feet . . . . .	Per 100	\$10.00
" " " 2nd size . . . . .		5.00
Deutzia Gracilis, 15 to 20 inches . . . . .		8.00

L. J. DENTON,

PLAINFIELD, NEW JERSEY.

## BOUND VOLUMES OF THE AMERICAN FLORIST

VOLUME II.

Handsomely bound in cloth with leather back and corners, and title lettered on back in gilt, may now be had from this office.

Price, \$2.25.

AMERICAN FLORIST CO.,

54 LA SALLE ST., CHICAGO



## Our Cut-Flower Trade.

### November Floral Styles.

BY OUR NEW YORK CORRESPONDENT.

The matching of foliage with the tints of blossoms is quite the rage, and will continue to be until Jack Frost puts an end to it. Carnations of variegated kinds look superbly matched by glowing foliage, long boughs of which are selected, in colors to suit. A new plaque has been introduced for placing on walls, which is highly ornamental. This has a background of brilliant fall leaves, which are very evenly laid on. A large spray of roses of tint harmonious to the foliage are laid on the plaque; these are sprinkled with lily of the valley sprays and somewhat shrouded with adiantum fronds. At the stems is a large cluster of Marie Louise violets, which are finished with a sash of exactly their color. The effect of the violet shade is splendid on the bright background. This plaque is made up on a large, flat, round basket, and has been ordered on several occasions for a gift, it being placed on the table or hung up.

A curtain of adiantums, with the inside turned back, is the newest arrangement for brides to be married before. The curtain hangs straight down, and is drawn back from the middle, showing the other side. Lilies of the valley are the lining most popular, but a curtain has been made this week with the part turned back formed of yellow chrysanthemums.

Blue and white are very fashionable colors in combination, particularly for wedding ornamentation. The most fashionable bridal bouquet is now composed of orange blossoms, with a cluster in one side of forget-me-nots. In all the bridesmaids' bunches is also a cluster of this flower. The side cluster appears in all hand bunches for full dress; it is sometimes of violets, and often of lily of the valley. In the bouquet de corsage it is placed at the stems, and the color of the ribbon which finishes is matched by the flowers of this small bunch. Brides' bouquets of orchids are extremely fashionable; none of them are made of white orchids, but lilies, oncidiums and cattleyas. They are combined with the choice kinds of asparagus.

All the bridal gowns with any pretensions to elegance are trimmed with natural orange flowers. Miss Morris' dress was the admiration of all eyes; it had a band twelve inches wide around the bottom of the skirt of these flowers, with a lovely spray of them extending down the train breadths from the waist to the lower edge. Where wedding dresses are made high in the neck, the flowers are put on to form a collar; they are brought across the corsage and down the left side of the skirt. This is a charming style of trimming.

Dinner arrangements are made with orchids more frequently than with other blossoms. Glass designs, representing shells and skiffs, are filled with oncidiums, of which Siebrecht is bringing in a beautiful variety. These are arranged about candelabra to look very fancifully. China candelabra are very fashionable, and are susceptible of exquisite floral decoration. Those of French blue porcelain will have a mat of cattleyas around the base, and oncidiums dancing about the lights. A fairy lamp is placed at each cover, and stands on a mat of flowers and foliage, which is the favor presented. It has a small loop of ribbon to attach to the belt. The idea is a good one. Sometimes neat little boxes are

passed around, in which the floral mat is placed, to be kept and taken home. At stag dinners the flowers are so arranged that they can be divided and sent home in boxes to each man's wife or sweetheart. All these little particulars are planned beforehand by the florist, and it adds much to the pleasure of guests.

For coming fairs, of which there are to be a great number, the gypsy camp will take the place of a floral temple, which has been a monotonous arrangement for a long time. A regular tent is formed of foliage and chrysanthemums to represent canvas, or of immortelles, cape flowers and the like. If the occasion is for one night only, the tent may be of more perishable stuff. Tent-poles are entirely covered. In the tent, which is set up so as to admit people at all sides, are camp-kettles, a camp-fire of flowers, floral divan, and many beautiful realistic designs, which will all sell readily and look beautifully. Flower girls wear gypsy costumes, always becoming and easily gotten up.



CASKET WREATH.

### Thorley's Casket Wreath.

This wreath is formed of four leaves of *Cycas revoluta*, under which is a satin ribbon of purple which is looped profusely at ends where are clusters of lily of the valley. Where the ends of the palms come together at their points, mats of smilax are placed under to raise these points somewhat. The wreath is, of course, very large, but rather small leaves are selected if possible. Fifteen yards of ribbon is used.

### New York.

Mr. John Thorpe started on the 19th ult. on a tour west. He will sell stock.

Flowers are to be put up at New Rochelle on the grounds of Siebrecht, Wadley & Thorpe, where Mr. Thorpe will hybridize orchids principally.

Mr. T. H. Spalding has offered \$100 in premiums for the best seedling chrysanthemums to be displayed at the Orange exhibition on the 3d, 4th and 5th of November. Mr. James R. Pitcher offers \$50 for the finest standard chrysanthemum.

Leading florists in this city intend having "openings," when seasonable novelties will be shown, among which will be gowns trimmed for weddings with natural flowers, and designs suitable for applying to dresses, such as girdles, sashes, belttes, etc.

As predicted some time ago, an impetus has been given in the flower show line, and now many of our principal cities are projecting chrysanthemum exhibitions on a grand scale.

Fall plant auctions have been unusually successful this year. Good stock has been disposed of at excellent prices.

Klunder was the first of the florists to make a display of orchids in his store

window this season. He had it decorated with oncidiums of several varieties, and it looked at a distance as if butterflies were flying over the foliage, which was profusely distributed.

It has been decided that the Langtry prize offered at the chrysanthemum show of the New York Hort. society shall be for the most effective arrangement of plants, and not for a dinner decoration, as at first proposed.

Schribler & Johnson, late with Le Mout, have opened a flower store at 156 Third avenue.

Thorley is receiving orders from London for American autumn leaves. These are bunched and packed in boxes.

Brower shows a new seedling carnation of Albert Benz's, which is superb. It is white, with a scarlet fringe.

Thorley has a Brewster coupe delivery wagon, which is very stylish, and uniform for his messengers.

### New York Retail Prices.

Perles, Niphetos, Souvs. and Gontiers, \$1 a dozen; Bon Silenes, 75 cents; Mermets, Cusins and Cooks, \$2; Dukes \$1.50; Bennetts, \$1.25; La France and Brides, \$2.50; Am. Beauties, \$3 to \$4; carnations, 50 cents; smilax, 40 cents a string; violets, \$1.50 a hundred.

### The Decorations at the Veiled Prophets' Ball, St. Louis.

In regard to the decorations at this ball, at which President and Mrs. Cleveland were received, Oct. 4, we clip the following from the *St. Louis Globe-Democrat*:

Rich lace embedded in the folds of cardinal curtains adorned the background of the presidential platform at the eastern end of the ball-room, and above the rostrum was suspended the transparency of the Veiled Prophet on a dragon. A feature of the decorations was their compact form and the massiveness of the spectacle presented by the elaborately and artistically dressed fountain in the center of the room. From the broad basin at the base to the top of the nymph-covered column ran a drapery of ferns and smilax. There were three basins at equal distances from the groundwork dependent from the column in the center, and from beneath the second of these shot prismatic jets of light. Surrounding the basin were six columns, five feet distant from each other, of fragrant roses. Tropical fruit and innumerable treasures of the hot-house were scattered in delightful confusion over the floor immediately surrounding the fountain, giving to the scene a rusticity that was truly charming. The silvery ripple of the waters furnished a rare accompaniment to the beauty of this embowered paradise, affording a banquet for the eye and ear that could find no rivalry short of fairyland. Hardwood designs were here and there to be seen along the lines of the galleries, while suspended from the ceiling immediately over the fountain was a huge globe of artificial flowers, which ascended at the signal for the Prophets to disperse, its parts assuming the shapes of globes just half the size of the original, which shot with lightning speed to opposite ends of the ball-room. The mechanical contrivance which accomplished this unique result has not yet been disclosed by the florist who designed it. At various points electric light shot forth with dazzling brilliancy from massive stars, flooding the room with its wealth of radiance. Over the main entrance hung a bespangled painting of the Goddess of Liberty, standing in her chariot and driving with liberal hand a pair of flying cloud-racers. Beneath this was a streamer on which were the words, "Welcome to our guest." The desk used by the president of the exchange was draped with American flags and ornamented with flowers and plants. Altogether, the arrangement of the floral and other decorations was in keeping with uncommon refinement and originality of taste.

MUSHROOMS.—A writer in the *Horticultural Times* states that when properly handled mushroom beds can be made to produce crops which will realize \$1.66 per foot. The crops should be marketed from October to May to secure the best prices.

**THE AMERICAN FLORIST**

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 Cents a Line, Agate;  
Inch, \$1.40; Column \$14.00.  
Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per  
cent; 12 months, 20 per cent.

No reduction made for large space.

The Advertising Department of the AMERICAN  
FLORIST is for Florists, Seedsmen, and dealers in  
wares pertaining to those lines ONLY. Please to  
remember it.REACH US by noon, Nov. 9. Address,  
THE AMERICAN FLORIST CO., Chicago.**Catalogues Received.**Hillebrand & Bredemeier, Pallanza,  
Italy, seeds; Gordon & King, University  
of Virginia, plants; V. Lemoine, plant  
novelties; A. M. C. Jongkindt Coninck,  
Dedemsvaart, Netherlands, plants; C. H.  
Murphy, Urbana, O., plants; I. N. Kra-  
mer & Son, Marion, Ia., plants; M.  
Grashoff, Quedlinburgh, Germany, flower  
seed novelties; Ang. Rolker & Sons,  
New York, florists' supplies; F. W.  
Harold, Salisbury, Md., plants.PROMPT RENEWALS of expired sub-  
scriptions will insure subscribers against  
missing any of the numbers. Please do  
not neglect to attend to it at once on ex-  
piration.PLEASE DO NOT send us local checks  
for small amounts. In renewing a sub-  
scription, inclose a postal note or a dol-  
lar bill. The exchange on a local check  
for \$1 amounts to one-fourth of its face  
value. If you do send a check, add 25  
cents for exchange.I' ILLUSTRATION HORTICOLE.—The  
last issue of this elegant publication con-  
tains colored plates of Galeandra d' Es-  
cagnalleana and Aglaonema nebulosum.THE TWENTY-FIVE DOLLAR PRIZE of-  
fered by the Queens Co., N. Y., Agricul-  
tural society for the best practical essay  
on shade and ornamental trees, has been  
awarded to Wm. Falconer.CANADIAN FLORIST.—I. Hill & Co.,  
Richmond, Ind., have them; we do not  
know the price. 2. We do not recollect  
an essay under the title given, but matter  
upon that subject by the writer named  
has appeared in nearly every issue.**Coming Chrysanthemum Shows.**

Philadelphia—November 8-12.

Boston—November 9-11.

Chicago—November 8-10.

New York—November 8-10.

Orange, N. J.—November 2-4.

Indianapolis—November 8-11.

Baltimore—November 2-4.

SUBSCRIPTIONS for the AMERICAN  
FLORIST may be left with any of the  
following:

Baltimore,  
R. J. Haliday,  
Boston, W. J. Stewart,  
Buffalo, Daniel B. Long,  
Cincinnati,  
Harry Sunderbruch,  
Cleveland, O.  
Mrs. E. G. Campbell,  
Detroit,  
J. Breitmeyer & Sons  
Hamilton, Ont.,  
J. Webster Bros.  
Harrisburg, Pa.  
J. Horace McFarland,  
Louisville,  
George Thompson &  
Sons.

New Orleans,  
H. A. Despommier,  
Philadelphia,  
Edwin Lonsdale,  
New York, W. S. Allen,  
Aug. Rolker & Sons,  
C. H. Joosten,  
Pittsburgh,  
J. R. & A. Murdoch,  
St. Louis, Michel Plant  
& Seed Co.,  
San Francisco,  
Thos. A. Cox & Co.,  
Toronto, Ont.,  
J. A. Shimmers,  
Washington, D. C.,  
L. Schmid & Sons.

**Wholesale Markets.****Cut Flowers.**

BOSTON, Oct. 25.	
Roses, Tea.....	\$1.50
" Perles, Niphetos.....	4.00
" Mermets, Bennetts.....	5.00
" La France.....	5.00
" Am. Beauties.....	10.00 @ 15.00
Violets.....	.50 @ .75
Lily of the valley.....	5.00
Carnations, white.....	1.50 @ 2.00
" colored.....	1.00
Chrysanthemums, per bunch.....	12.50
Smilax.....	1.50
Adiantums.....	.75
Laurel wreathing, per yard.....	.08

NEW YORK, Oct. 25.	
Roses, Bon Silences.....	\$1.50
" Perles, Niphetos.....	4.00
" Papa Goudiers.....	2.00 @ 3.00
" Sou's, Cusins.....	4.00
" Mermets, Cooks.....	6.00
" Dukes.....	5.00
" La France.....	5.00 @ 6.00
" Bennetts, Brides.....	12.00 @ 15.00
" Am. Beauty.....	2.00
Mignonette.....	2.00
Smilax.....	2.00
Carnations, long stems.....	1.50 @ 2.00
" short stems.....	1.00
Lily of the valley.....	5.00
Violets.....	1.00

CHICAGO, Oct. 25.	
Roses, Perles, Niphetos.....	\$4.50
" Mermets.....	5.00 @ 6.00
" Bennetts, La France.....	5.00
" Am. Beauty.....	12.50 @ 15.00
" Anfrans.....	2.00
" Bon Silences.....	5.00
Carnations, long stems.....	1.50 @ 2.00
" short stems.....	1.00
Tuberose.....	1.50
Callas.....	12.50
Smilax.....	15.00
Violets.....	.75
Bouvardia.....	1.00
Chrysanthemums.....	2.00 @ 3.00

PHILADELPHIA, Oct. 25.	
Roses, Tea.....	\$1.50
" Perles, Mermets, Brides.....	4.00
" Niphetos.....	5.00
" Am. Beauty, Niels, Cooks.....	10.00
" Bennetts.....	5.00
" La France.....	4.00 @ 5.00
Carnations.....	.50 @ .75
Bouvardia.....	.50
Smilax.....	2.00
Lily of the valley.....	5.00
Callas.....	10.00
Chrysanthemums, per bunch.....	.50
Supply large.....	

If you want FRESH FLOWERS of  
best quality, carefully packed and prompt-  
ly shipped, order from**WM. J. STEWART,**

67 Bromfield Street, Boston, Mass.

MARIE LOUISE VIOLETS; LILY OF THE VALLEY;  
CHRYSANTHEMUMS AND ADIANTUMS.  
First Quality, in Unlimited Quantities.**W. S. ALLEN,**

WHOLESALE DEALER IN CUT FLOWERS,

36 EAST 237 STREET, NEW YORK.

ESTABLISHED 1877.

Price List sent upon application.

**W. F. SHERIDAN,**

WHOLESALE FLORIST

721 SIXTH AVENUE, N. Y.

Mention American Florist.

**LaRoche & Stahl,**  
Florists & Commission Merchants  
—OF—  
CUT FLOWERS.1237 Chestnut Street, PHILADELPHIA.  
Consignments Solicited. Special attention paid to  
shipping. Mention AMERICAN FLORIST.**EVERY FLORIST**

Should have our

New Trade Directory.

**Thos. Young, Jr., & Co.,**  
**Wholesale Florists,**

INCORPORATED 1885,

23 West 23d St., NEW YORK.

**J. C. VAUGHAN,**  
**WHOLESALE CUT FLOWERS**Direct all cut flower orders to cut flower  
department

VAUGHAN'S SEED STORE, 42 La Salle St., CHICAGO.

**WELCH BROS.,**  
**WHOLESALE FLORISTS,**155 Tremont Street, BOSTON MASS.  
We make a specialty of shipping choice Roses and  
other Flowers, carefully packed, to all points in  
Western and Middle States.Return Telegram is sent immediately when it  
is impossible to fill your order.**HAMMOND & HUNTER,**  
Wholesale dealers in  
Cut Flowers and Florists' Supplies

51 West 30th Street, NEW YORK.

**JOHN J. PERKINS,**  
Wholesale and Commission  
= FLORIST =

57 West 26th Street,

(Telephone No. 672, 30th St.) NEW YORK.

Branch, 34 S. 16th St., Philadelphia, Pa.

Greenhouses, Creskill, N. J.

**A. M. & J. B. MURDOCH,**  
**WHOLESALE**  
**CUT FLOWERS.**

510 SMITHFIELD STREET,

PITTSBURGH, PA.

SEND FOR PRICE LIST.

**CHAS. E. PENNOCK,**  
**WHOLESALE FLORIST,**

38 So. 16th Street, Philadelphia, Pa.

**C. STRAUSS & Co.**

Telephone 977-3. WASHINGTON, D. C.

Grower of and Wholesale Dealers in

**ROSES and OTHER CUT FLOWERS**

1000 Puritan Planted for coming Winter.

**CUT FLOWERS**The choicest Cut Flowers at lowest market rates  
shipped C. O. D. Telephone connection. Use A. F.  
Code when ordering by telegraph. For prices, etc.,  
Address,  
J. L. DILLON, BLOOMSBURG, PA.**ROSS & MILLANG,**  
**Wholesale : Florists,**

NO. 1168 BROADWAY,

(Formerly at 225 5th ave.)

Bet. 27th &amp; 28th sts., NEW YORK.

**N. F. MCCARTHY & CO.**  
**COMMISSION DEALERS**

IN CUT FLOWERS AND FLORISTS' SUPPLIES.

We make a specialty of Mermets, Niels, La France,  
Bennets, Cooks, Perles, Niphetos, Grace and  
Anna Webb pinks, and all other flowers in variety.  
We price list nothing but first-class flowers and make  
a specialty of shipping; all flowers invariably ship-  
ped at buyer's risk. We handle as fine a stock as  
Boston produces. Auction sales of bedding plants:  
Spring sales every Wednesday and Saturday from  
April 23 to June 15. Fall sales from Sept. 17 to Oct. 1.

WRITE FOR PARTICULARS.

63 Bromfield Street, (under Hort. Hall),  
BOSTON, MASS.



## Seed Trade.

SEED TRADE ASSOCIATION.—William Meggat, president, Wethersfield, Conn.; Albert M. McCullough, secretary, Cincinnati, O.

ONION SETS, especially white, are scarce and advancing.

CANARY SEED is reported lower in London Oct. 1. Hemp, unchanged; Italian rye grass, higher.

IT SEEMS impossible to locate either east or west any good supply of first-class seed potatoes.

D. M. FERRY & Co. and A. B. Cleveland Co. both have ready the early editions of their retail catalogues.

THE LONDON FRUIT BUYERS and auctioneers formed a protective association Sept. 20. Mr. H. Knightly, secretary.

VISITED CHICAGO during the past two weeks: Mr. Geo. Child of London, Mr. Chas. Bates of Vilmoren, Andreux & Co., Paris; Comstock, Ferre & Co.

E. S. BRISTOL & GALE, implement and seed dealers at Chicago, have doubled their floor space and enlarged their main floor office.

ONLY FOUR agricultural papers have so far failed to sign the agreement not to give away seeds or plants. Secretary McCullough of Cincinnati will furnish a list of the black sheep.

JOHN LEWIS CHILDS over a year ago started a branch seed store in London. Instead of confining their orders to American plants and seeds, Mr. Childs tells me, his English customers order most everything in his catalogue. F.

## Catalogue Suggestions.

A correspondent of the *London Garden* gives the following suggestions for seed and plant catalogue work:

Trade catalogues are for the most part very badly arranged. The different classes are too much mixed together, and yet one sometimes has to look through several lists in one catalogue before one can find some particular flower of which one may be in quest. Every catalogue, whether of seeds, roots or bulbs, should have separate divisions for "annuals," "biennials" and "perennials," and each of these again should be grouped under headings of "hardy," "half-hardy," "greenhouse," "stove," etc. Bulbs should be distinguished, in the first instance, as "autumn plants" and "spring plants," according to the time at which they are most successfully to be dug up and replanted. The common method of mixing things all together, and trying to distinguish them by means of certain hieroglyphs prefixed or suffixed to the names, is most confusing and annoying to the reader. There should be, in the first place, the greatest possible amount of division and subdivision, and then (this is most essential) a complete alphabetical index to bind the whole together and enable every name to be "spotted" off-hand. Each catalogue should contain two or three order sheets, instead of only one. Every seed packet should have on it the date of the year of gathering; should state the height, color and habit; whether annual, biennial, or what else; whether hardy or half-hardy or tender; and should give full cultural directions. These improvements would greatly lessen the labor both of making out orders and of sowing seeds, and consequently would

make people order more than they do. For my own part, I care almost entirely for hardy perennials and bulbs, but I want a good separate list of each of these, with the bulbs under distinct heads of "autumn" and "spring." Finally, florists should not waste so much wind in blowing their own trumpets. The noise they make (on paper) is distressing, and the English in which it is made often terribly needs revision.

## Boston.

Miss M. S. Newman has opened a flower store in Horticultural Hall building.

The Gardeners' and Florists' Club is looking for a permanent headquarters.

The war between the wire design manufacturers here still continues. Prices of many forms are only about one-quarter of what they were a year or two ago. Prudent people are laying in a stock ahead.

D. Zingiebel is about to build a house specially for the purpose of testing different strains of pansies from the various European and American growers.

Mr. Doogue finds an effectual means of getting rid of all the refuse geraniums and other plants at the public garden, which are now being thrown out to make room for the bulbs. Between certain hours of the day the plants are given away to all who come for them. Enormous quantities are thus disposed of, and the homes of the poorer classes are brighter in consequence. This is an example worthy of imitation.

"Anybody can grow chrysanthemums"—so they used to say. But the high bred pets of to-day seem so easily managed as the old sturdy plebeian pompous, witness some of the crack chrysanthemum growers who until recently knew all about it, but now they are very quiet and thoughtful. They "won't exhibit this year," and they "don't know exactly what is the matter." W. J. S.

## Cincinnati.

The button of the Loyal Legion traced in flowers was an unique design noted at a recent funeral.

An Avondale bride and groom stood beneath a floral butterfly made by Critchell a few days ago.

An old bachelor was married here recently under a Cupid's bow and arrow. A witty young girl declared that a floral axe would have been more appropriate, for the god of love was so long making a conquest.

Lilies of the valley are just now having the call for bridal bouquets. There have been fewer October weddings than usual this year, and society is late getting the festive ball to rolling, much to the regret of the florists.

Garges has removed his place into the Geneva Hotel building, a hostelry frequented by theatrical people. His store certainly looks bright.

A very pretty and decidedly unique funeral piece was made by Huutsman for the hier of a dead printer. It was a composing stick of white carnations and bouvardia.

A show piece—a vase made up of about 300 dahlias of all colors of the rainbow—attracted considerable attention in Huutsman's window this week.

The Elks presented tragedian Downing with a magnificent design—a great horse-shoe of red carnations upon an easel surmounted by a pair of elk's horns of roses and bouvardia.

A chaste funeral design sent out by Huutsman was a column of ferns five feet in height garlanded with Mermet roses from the base to the top. An anchor rested at the foot of the column.

REN MULFORD, JR.

## Philadelphia.

Mr. D. D. L. Farson, secretary of the Florist Club, has received the following in Mrs. Cleveland's own handwriting, dated at Oak View:

"Mrs. Cleveland desires to express to the members of the Florists' Club, of Philadelphia, her cordial thanks for the beautiful and unsurpassed floral designs which contributed so greatly to the pleasure of herself and friends during her recent visit in Philadelphia and for which she is indebted to the courtesy of the Florists' Club."

Of all the American Beauties brought into the Philadelphia market, it is conceded that Mr. Edwin Lonsdale has the banner crop of this favorite rose, both in quality and quantity. His already extensive place is coming into prime order and its future outlook is encouraging. F.

## Pelargoniums and Hydrangeas.

I would like to enquire through the *FLORIST* the best way to winter pelargoniums. I have them all sizes, from 2½-inch to 8-inch pots. Also will it answer to repot and keep growing hydrangeas Thos. Hogg, Nigea and other kinds that are in 2½-inch pots? They were taken out of the cutting bench in August and September. They are healthy plants, but small. E. O. ROCKWOOD.

Norfolk, Mass.

FLUES FOR HEATING.—A. W. M. in his "Odds and Ends," in last issue, speaks about roses, palms and ferns in houses heated by flues. Allow me to say that I have not yet seen better roses grown in houses heated otherwise, than those seen some years ago, on a place where I served some years of my apprenticeship with a noted rose forcer; mostly hybrid perpetual roses were forced in pots, and largely sold in pots (not merely to cut flowers from); and he always had remarkable success with them. It has never been my pleasure since to see such clean and healthy looking plants. I have had some experience in the same way recently, having myself been obliged to grow roses in houses heated by flues. Our most successful rose grower here in St. Paul has grown splendid roses in houses heated that way. So there is no doubt but as good results may be obtained in flue-heated houses as in those heated by other means. Of course I claim this where good flues only are used—not poorly built smoky affairs. The most important point with flues is to supply with the heat a sufficient amount of moisture. This may be secured by keeping water on the flues in shallow pans of zinc or galvanized iron. Still I would not advise the use of flues where new heating apparatus is to be put in, as the difference in cost of first-class flues and hot water apparatus is not great enough to warrant the additional work and trouble in heating with the former. AUG. S. S.

A GIANT ARBOR VITE.—Mr. A. C. Oelschig, Savannah, Ga., sends us a photograph of an Arbor Vite compacta growing near Savannah, which measures 75 feet in circumference.

### The Philadelphia Chrysanthemum Show, Nov. 8th to 11th.

The interest in this show is waxing very warm at this time. That it will be a grand affair there is no doubt. It is five years since Robert Kift first espoused the cause of this very popular flower. To his efforts and influence are due what now every florist in Philadelphia is proud of.

In addition to the regular premiums offered by the society, which are both generous and numerous, a fund has been guaranteed amounting to \$500; it was originally \$600, but it has been deemed advisable to reduce it to \$500, making the first premium \$200, instead of \$250 as was originally intended. The premiums are divided as follows: For the best collection of twenty-five plants, twenty-five varieties—\$200 first, \$150 second, \$100 third, \$50 fourth. All entries had to be made prior to May 1, and were subject to an entrance fee of \$15. The "Pembroke prize" is a silver cup offered by Mrs. Charles Wheeler for the best four Japanese in four varieties; the "Wootton prize," a silver cup offered by Mrs. Geo. W. Childs for the best four Chinese in four varieties; the "Red Leaf prize," value \$15, offered by Mrs. W. P. Heuszly for the best three yellows in three varieties; the "Wilbur prize," a silver cup offered by Mr. E. P. Wilbur, South Bethlehem, Pa., for the best collection of cut flowers in not less than 100 varieties, three flowers of each variety; the "Sunnyside prize," a silver cup offered by Mr. Joel J. Bailey for the best seedling plant in bloom that has never before been exhibited; the "Record prize," value \$25, offered by Mr. Wm. M. Singerley for the best six plants in variety, naturally grown, without disbudding; the "Waterer prize," value \$25 (for amateurs only) for the best ten plants in ten varieties that have been introduced by H. Waterer in 1887.

Horticultural Hall is well known to be better adapted for a display of this kind than any other in the country, it having been built especially for horticultural exhibition purposes seven years ago; and of all the exhibitions held by the Pennsylvania Hort. society none have attracted so much attention as the chrysanthemum show, and this year the interest shown is far greater than at any other.

E. L.

**BLUE DAISIES.**—While the demand for blue flowers is on why not place upon the market the flowers of *Cineraria amelloides*? They are very pretty and last well when cut.

F.

**COCKSCOMBS.**—A ribbon bed at Lincoln Park, Chicago, the past summer planted with alternate lines of dwarf red cockscombs and *Cineraria maritima* was remarkably handsome.

**CHRYSANTHEMUM MARY EDD** is considered the best early white for cutting by a Chicago grower. The blooms are small, pure white, very full, and each plant bears immense quantities of flowers.

**CAMELIAS.**—Those that require cleaning should be attended to at once. This is especially necessary where the buds are swelling rapidly. Be careful not to use insecticides too strong at this period of the development of the flower bud, for they are easily checked, and this would probably result in the buds dropping before they are fully developed. Water carefully, keeping neither too wet nor too dry.

**TULIPS AFTER BEING FORCED.**—Will some one who has had experience please give us an idea as to the value for bedding of tulips that have been once forced for cut flowers?

E. S. H.

**TREE PLANTING.**—A New York daily states that of two rows of Oriental Plane trees nearly a mile in length planted on the north and east margins of Morning-side park, over 90 per cent. are dead, and of another row on the south border of the park not a tree remains.

**HARTFORD, CONN.**—The last quarterly meeting of the Hartford Co. Hort. society was well attended, and much enthusiasm was manifested. The subject of holding another exhibition was referred to a committee, with power. Another committee was appointed to arrange premium list for 1888, and it is expected that it will be announced soon. It was voted to hold monthly meetings through the winter. The society now numbers 100 members.

### GREENHOUSE HEATING.

BY A. B. FOWLER.

Explains fully all the best systems of heating greenhouses by both hot water and low-pressure steam. Tells you the points to consider in selecting an apparatus. How to adjust same to various locations gives the results of the latest scientific experiments. Shows how to compute the number of feet of pipe required for a given space; draft and other important matters.

It is highly commended by Mr. John Thorpe and others. Postpaid, 75c.

Sent on receipt of price. Address,  
**AMERICAN FLORIST,**  
CHICAGO.

### GROWTAGE'S PATENT BUILDING FOR HORTICULTURE



—GLAZED WITHOUT PUTTY.—  
Endorsed by the New York Horticultural Society. Illustrated Circular mailed on application. Plans and estimates given for every description of Horticultural Buildings.

**H. J. GROWTAGE,**  
76 Myrtle Avenue, BROOKLYN, N. Y.

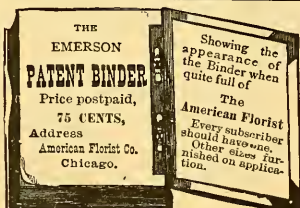
### SYRACUSE POTTERY READY PACKED CRATES of POTS

Shipped at buyer's risk and freight; cash with order. Price per crate of 3,150 Thumbs (16 2/3 in.). \$ 2.25  
2,625 2 1/2 in., \$ 8.25 1,875 2 1/2 in., \$ 7.50  
1,150 3 in., \$ 5.75 875 3 in., \$ 5.50  
600 4 in., \$ 4.75 300 4 in., \$ 4.50  
320 5 in., \$ 4.40 160 5 in., \$ 4.20  
1,300 special 3 in., \$ 6.25 1,700 No. 2 Rose, \$ 7.00.

### FLORISTS' FLOWER POTS ONLY.

Floods of orders compelled us to double our capacity. We are now able to fill all cash orders instantly. Special low prices for large cash orders. Very low list to all places, small and great. On one crate of 300 lbs. the freight to Cleveland is 45c., Detroit 50c., Cincinnati 60c., Chicago 75c., St. Louis 85c., St. Paul, Pensacola, Mobile and New Orleans 81.50; most points in N. J. and Pa. 54c. We ship many to Fla., Ala., La. and Texas. Samples all sizes with first order. Add 10c. if you send check. Send for prices, list, rates and free samples by mail. No delay. Try us.

**J. N. PERKINS, Manager, Syracuse, N. Y.**



### NOT TOO SOON

To correspond NOW about your Spring Catalogue. You can get it made better than ever, with less bother to you, and plenty of good cuts, by

### THE FLORIST-PRINTER,

Who has long experience and superior facilities.

### BE AHEAD OF THE RUSH

And write for samples and estimates to

### J. MORACE MCFARLAND,

Printer for Nurseriesmen, Florists and Seedsmen,

HARRISBURG, PA.

### PIPE AND FITTINGS FURNISHED

—TO—

### PLANS AND SPECIFICATIONS.

Contracts solicited for

### HEATING GREENHOUSES.

Most improved plans.

### ALL WORK GUARANTEED.

Prices furnished on application.

### E. A. STIMSON & CO.,

No. 22 and 24 Sears Street,

DAYTON, OHIO.

### NICE STOCK, LOW PRICES.

Per 100  
Clematis Virginia, strong plants, ..... \$6.00  
Aristolochia Siphon, 1 year, transplanted, ..... 5.00  
Hydrangea P. G. from 2 1/2 inch pots, ..... 3.50  
Seven Sisters Roses, from 2 1/2 inch pots, ..... 5.00  
Hyacinthus Candicans, 1 year bulbs, ..... 5.00  
Sugar Maple Seedlings, 6 to 10 inches, ..... 2.00  
D. LEE & SON, Madison, Lake Co., Ohio.

### MELON SEEDS 14c. to 40c. per pound.

Send for PRICE LIST.  
Odella, Black Spanish, Kolb Gen. Dark Teig, Iron Clad, Pride of Georgia, Hackensack, Bird, Golden Gem, Banana. FREEMAN HURFF, Swedesboro, N. J.

### PAPER SEED BAGS, PLAIN OR PRINTED, BEST QUALITY AND AT LOWEST PRICES.

Many years' experience in the Seed Business enables me to make Catalogue Work and Seed Bag Printing a Specialty. Refer to Phila seedsmen.

GEORGE A. KARR, Philadelphia, Pa.



### TRY DREER'S

### GARDEN SEEDS

Plants, Bulbs, and Requisites. They are the best at the lowest prices. "TRADE LIST" issued quarterly mailed free.

**HENRY A. DREER,**  
Philadelphia

ONLY POTTERY MAKING A SPECIALTY OF

### FLOWER POTS

FOR FLORISTS.

### THE WHILLDIN POTTERY CO.,

713 & 715 WYHARTON ST.,

PHILADELPHIA.

### CLOSING OUT SALE.



Of the Finest

IMPORTED

ARTIFICIAL

FLOWERS.

The entire stock sold at half price. A good chance to start in business, or to buy part cheap.

**PHILIPP BONTE, IMPORTER,**  
111 Fifth Avenue, CHICAGO.



## Statesmen who Love Flowers.

The following interesting interview with Wm. R. Smith, superintendent of the Botanic Gardens at Washington, recently appeared in the New York Star:

"Do public men know or care much about botany or your garden?" a Star reporter asked him.

"That's a question," he replied, "that can be answered in several ways. To most of them the science is a sealed book. They only know the garden as a convenient flower bank, to draw on when their wives give dinner parties, or wait to fix up for reception days, or their sweethearts need a few pauties for remembrance. Of course there's no sympathy between such propensities and mine."

"But there are exceptions, no doubt?"

"Oh, yes, and some very distinguished ones. Some public men have excellent tastes and are experts in the science. Mr. Sumner was a great enthusiast; he ran to trees, and was about the most intelligent man on the subject I ever met in public life. He used to tell me that when traveling he would peer out of the car windows by the hour, on the lookout for a beautiful tree, and when his eye for the lovely and symmetrical was satisfied he would go into raptures. He would gaze as lovingly as a fond parent on the Italian beech that stood so long east of the Capitol, and what an apostrophe he paid it in one of his speeches! The last enjoyment I had with him, shortly before he died, was in visiting a favorite elm on his Boston common. Senator Ingalls of Kansas, a very dilettanti gentleman in his tastes, also runs to trees, and is a most devoted student of arboriculture. Some of the most valuable suggestions about distributing plants in the west come from him."

"And then," the veteran botanist continued, "there have been others with a passion for botany. Mr. Fessenden of Maine was an ardent amateur all through his long public life. I remember that his wife had a sweet verberna in their home in Maine of which she was very fond. She watched it tenderly as a child, and Mr. Fessenden shared the feeling so thoroughly that for thirteen years he would journey home from Washington to take up the plant in the autumn, and make another trip in the spring to set it out. No pressure of public business could make him forget that verberna. It was really a paternal devotion."

Senator James A. Pearce of Maryland was one of the most cultivated botanists ever in congress. Scarcely a day passed that he did not drop in on me to watch the growth of some favorite plant or some new experiment, and his ideas were always scientific and valuable. And then there was B. Gratz Brown, a very warm lover of flowers and thorough master of their cultivation. During all the time he was in the senate I don't think he missed a day at the garden, and we would chat for hours when he felt in the humor. It was a passion with him as well as an instinct."

"There's also that botanist in congress, a most ardent disciple, and I know the name will surprise you—Mr. Holman of Indiana. Who in the world would ever pick him out as a lover of flowers? He is generally looked upon by people who want to run their arms into the public crib as a man with narrow and niggardly instincts. It seems almost a contradiction that one of his reputation should be a lover of flowers, but he certainly is. No one has been in congress since I can remember, and that's a long time, with a more hearty and intelligent love for the garden. He is a frequent visitor, and you can see from his conversation that he watches every new phase of the science as keenly as he does the money bags of the treasury. It seems to be a mental exhilaration for him to commune with these curious plants from all over the world, and study their hidden life. He is quite as familiar with the botanical names and the habits of plants and flowers as most professional botanists. He picked it up as a recreation, and his spare time is nearly all devoted to it."

"Sam Cox is a first-class botanist, but let me add that he's also the best reader I ever met. It is a walking encyclopedia on every subject covered by books. He not only has a great deal at ready command, but his gift of rapid exploration is really marvelous. If any phase of a new subject is introduced, he will know enough of some kindred subject to give him the key to the situation, and it's really incredible how soon he can inform himself. Now in botany, for instance, he will strike a snag some afternoon when he didn't know anything about, but the next morning he'll come around with his mental channel all bridged out. But then this doesn't apply to his botany alone; it's the same with everything else. He can learn more in shorter time than any man I ever saw."

THE NORTHWEST HORTICULTURIST.—We have received the first issue of this new monthly, published at Tacoma, Wash. Ter. Henry Bucey, the president of the Washington Hort. society, is editor and publisher.

## Chrysanthemum Coronarium Cloth of Gold.

Calling at Mr. Owen's nursery, Castle Hill, Maidenhead, I saw some bushes of this fine single chrysanthemum that he said were two years old. The plants are taken up in the autumn and potted. They flower in a greenhouse all the winter, and they grow in the open ground again in spring. The flowers are of a fine, clear yellow color, of excellent form, and freely produced; and the plant seems to bloom with remarkable freedom summer and winter alike. As it does not seed it has to be kept propagated by means of cuttings, which strike readily enough. I think this makes an excellent plant for cutting, and especially through the mid winter months when flowers are scarce.—R. D., in London Garden.

## SILVER AND BRONZE GERANIUMS

MAD. SALLEROI, HAPPY THOUGHT, MAGLESSI, GOLIATH, FLOWER OF THE DAY, BLACK DOT GLASS SILVER CHAIN, BISMARCK.

Strong plants from 2½ and 3-inch pots, per 100 \$4.00; per 1,000 \$35.00, as long as present stock lasts.

MICHEL PLANT AND SEED CO.

718 Olive St., ST. LOUIS, MO.

## GRAND \* STOCK \* PLANTS. MAMMOTH VERBENAS

(One plant of which now, is worth ten in January.)

12 finest selected market sorts, \$3.00 per 100; \$12.00 per 1,000; embracing best contrasting colors.

GERANIUMS—12 best double market sorts, \$6.00 per 100; \$50.00 per 1,000.

PRIMULAS—Single, six distinct colors, \$6.00 per 100; \$50.00 per 1,000.

SMILAX—\$4.00 per 100; \$30.00 per 1,000.

NEW WHOLESALE LIST SENT ON APPLICATION.

## PETER HENDERSON &amp; Co.,

35 and 37 Cortlandt Street, NEW YORK.

## THE AMERICAN FLORIST'S

## : : DIRECTORY : :

## OF FLORISTS, NURSERYMEN AND SEEDSMEN

## OF THE UNITED STATES AND CANADA.

1887.

## PRICE ONE DOLLAR.

The most complete and accurate list yet published. The key designates the particular branch of the trade each one is engaged in. The street and number of those living in cities will insure the delivery of tons of catalogues which have hitherto remained dead in the office to which they were addressed. This low price every one in the trade can afford to have a copy for reference. Address

## AMERICAN FLORIST CO.

54 LA SALLE ST., CHICAGO.

## FOR THE TRADE.

	Per 100
Malmuison, Sombriell, La France, Giant de	
Batties, Mad. Alex. Bernaix.....	\$ 5.00
Mernats, Cocks, Safranos, Bon Silene, White	
Bon Silene, Mad. Camille, Adam, Comt. de	
LaBarth, Alina Sisley, Optella Gerard Des-	
boise, Clement Nabonnand.....	4.00
Double sweet Alyseum.....	3.00
Fine collection of Verbenas.....	\$2.00 @ 3.00
Samples mailed for 25 cents.	

GEO. THOMPSON & SONS,

20 Greenhouses. LOUISVILLE, KY.

## BULBS, ROSES

## AND CLEMATIS.

	Per 100
HYACINTHS, Romans, white, single, for	
forcing.....	\$ 4.00
" Mixed.....	4.00
" Colors.....	6.00
LILLUM, Candium, strong bulbs.....	4.00
" Longiflorum.....	5.00
NEW ROSE-PURITAN, strong, 4-in. pots	
75 cents each.	
ROSES, H. P., strong, 2-years, from open	
ground, assorted, 2½ to 3 ft. 10.00	
CLEMATIS, Jackmanii, 2-years.....	25.00
" Assorted.....	30.00
" Corcoran.....	10.00

## Bloomington (Phoenix) Nursery,

SIDNEY TUTTLE & CO.,

Established 1852. BLOOMINGTON, ILL.



## Dutch Bulbs.

*R. van der Schoot & Son.*

HILLEGOM (Near Haarlem)

HOLLAND.

ESTABLISHED 1830.

GROWERS OF

Hyacinths, Tulips, Crocus

Narcissus, Lilies, Etc.

Intending purchasers, before ordering Bulbs, write us for a Catalogue.

Mention Am. Florist.

**AUGUST RÖLKER & SONS,**  
NEW YORK.

—Supply the Trade.—

## DUTCH BULBS!

Catalogues on application.

**C. H. JOOSTEN,**

IMPORTER,

3 Coenties Slip, NEW YORK.

Mention American Florist.

## DAHLIA \* \* \* \* \* \* ODORATA.

Sweet-scented Single Dahlia, very dark black-brown, excellent for fine floral work, offered in original roots, at

\$2.50 EACH; 10 FOR \$22.50.

**J. SIEKMANN,**

Kostritz (Thuringia), GERMANY.

## SMILAX.

10,000 Strings of Smilax for the trade. Steady contracts solicited.

**F. E. FASSETT & BRO.,**  
ASHTABULA, OHIO.

## FRENCH AND AMERICAN NOVELTIES FOR 1887

— IN —

ROSES, CARNATIONS, CHRYS-  
THEMUMS, GERANIUMS, ETC.

Special offer of

OUR NEW SEEDLING WHITE CARNATION  
**SILVER SPRAY,**

The Best White for Florists' use.

We have also a splendid stock of Geraniums and Fuchsias in ½-in. pots, of last spring's propagation. Our Fall Price List with prices and descriptions now out; send for a copy.

**W. P. SIMMONS & CO.**

GENEVA, OHIO.

☞ We issue no Retail Catalogue.

## CLEMATIS.

12 fine varieties Clematis. Per Doz. \$2.50  
12 fine varieties Moss Roses, 2 year. 1.50  
10 choice Grape Vines, Niagara. \$1.00 @ 2.00  
20 varieties Dahlias, grand flowers. 1.50  
Ampelopsis Veitchii, 2 ft. 1.50  
12 Chinese Peonies in var. 1.00  
12 Downing Gooseberry. 1.00  
Above in quantity at very low rates. Also all kinds hardy and monthly roses, bulbs, greenhouse plants, mulberry, Irish juniper, &c. Inquiries promptly answered.  
**F. A. BALLER, Bloomington, Ill.**

## A CIRCULAR OF DESCRIPTION, &C., FOR OUR New Tomato, "Volunteer,"

— AND —

## New "Carnation Striped" Zinnias.

Will be sent to the trade during this month, in time to insert in Spring Catalogues.

## V. H. HALLOCK & SON, QUEENS, NEW YORK.



### A LARGE STOCK OF SELECTED

ROMAN HYACINTHS, LILIUM HARRISII, FREESIA REF. ALBA, and a fine line of 15 varieties forcing Narcissus, dbl. and sgle.

LILIUM CANDIDUM, large bulbs; also a full assortment of DUTCH HYACINTHS, TULIPS, CROCUS, &c., from the best Holland growers. Select florists' seeds, Fancy, Primula, Cineraria, &c. Send for Price List, now ready.

I am now booking orders for BOUQUET GREEN, WREATHING and HOLLY. Let me have your orders early.

**JAMES KING,**  
170 LAKE ST., CHICAGO.

## F. E. McALLISTER,

— WHOLESALE DEALER IN —

Seeds For the Florist Requisites Such as Baskets, Im- For the Green-  
Market, Garden- Mortelles, Grasses, mouses, Bouquet Pa- house or Gar-  
er and Farmer. pers, Pampas, Phloxes, etc. den.

22 Dey Street, - - - NEW YORK.

## VAUGHAN'S

## Special Holiday List is Ready

WRITE FOR IT.

**J. C. VAUGHAN,** 42 La Salle St., CHICAGO.



LILIUM CANDIDUM, Extra select. . . . . per 100 \$5.00  
Fine Imported Bulbs, per 100 \$4.00, per 1,000 \$35.00

**FINE SHEET MOSS, by Bale or Barrel.**

**MICHEL PLANT & SEED CO.,**

718 Olive Street, ST. LOUIS, MO.

We Again Offer our  
First-Class Holly—Good  
Green, Plenty of Berries,  
and can quote Special  
Rates to important points  
North, South and West.

# HOLLY

Per Case, \$5 00; 3 Cases for \$13.50. Larger Lots on application. Order Early, and you will have the Holly in ample time. We can refer to Florists in all large cities. THOS. G. HAROLD, Kingston, Somerset Co., Md.

## SPECIAL LIST.

Hyacinths in colors. . . . . Per 100 \$ 4.00  
Hyacinths, Romans. . . . . 3.50  
Tulips, double and single. . . . . 2.50  
Narcissus, Paper White and Poetons. . . . . 2.25  
Lily of the Valley (ready in November). . . . . 2.00  
Carnations, Hinz's White, strong. . . . . 15.00  
Roses, Gen'l Jacqueminot. . . . . 4.00  
Send for Fall List, now ready.

**A. GIDDINGS, DANVILLE ILL.**

## BULBS! BULBS! BULBS!

Before placing your order for HOLLAND BULBS write me for my trade list. I have made special arrangements with some of the largest growers in Holland, and can offer you TERMS and PRICES better than any other firm does. All orders over ten dollars will receive a CREDIT until May 1, 1888. Write for terms and prices.  
**E. HIPPARD, Youngstown, Ohio.**



## Cleveland.

Andrew Eadie has changed from hot water to steam.

A. Graham has added two new houses and built a pleasant store out on the street directly opposite Lake View cemetery.

Herman Hart says no one can beat his chrysanthemums.

A. C. Kendel, our worthy president, is up to his ears in business, but still has time for everybody.

Geo. Probeck is rebuilding his whole place.

Gordon's rose houses are looking well, but are not yielding much bloom yet. There has been a scarcity of Niphetos and Perles and white carnations so far this fall. Frost here on Sept. 23 destroyed coleus and hurt the alternantheras, etc., in carpet beds.

We have a few carpet beds here that can still compare very favorably with the Chicago beds. So say our florists.

Fred. Aul of Glenville is adding one new house.

A regular building boom seems to have struck the florists. All are adding new glass; some are putting in steam, discarding flues or hot water, or otherwise making additional and desirable improvements. Newer and more progressive ideas seem to have taken a strong hold on our somewhat slow and conservative fellow craftsmen. The Am. Florist is responsible in part for this awakening, and the S. A. F. is another important factor. Not one of the Cleveland members that attended but was "glad he went," and we all hope to take New York by storm next year with a good-sized delegation.

J. M. Gasser has lately erected at 101 Euclid avenue a store which equals anything I have yet seen in this line. At the store room proper is 21 x 78 feet; at the rear is a solid staging intended for plants. This is thirteen feet high and covers a space 17 x 21. This arrangement is a most striking feature of the store, forming a beautiful green background of fine tropical plants. Fine cases of black walnut with panels of French burr walnut; plate glass doors with mirrors in back, and filled with the latest novelties in the way of baskets and fancy designs, form a feature of the west side of the show room. A special feature is the ice-box; this occupies a central position on the east side

of the store, is of solid black walnut in heavy panels, highly polished, and is a very ornamental piece of furniture. Mr. G. claims it is the best in the United States. Two heavy doors, with a central one of plate glass, expose the whole interior to view. The shelves are arranged as staging, and furnish a chance for a fine display of cut bloom. These can all be removed to allow large standing designs to be put in. The ice is placed in a compartment at the top, which holds about 1,000 pounds. Marble top counters, with part of them covered with show-cases filled with ribbons, doves and made up immortelle designs, go to make up the balance of the interior furnishings. The show window is fifteen feet long by four feet deep, with large plate glass front, the height of the store room. The basement, which extends under the whole store and sidewalk, is for packing and shipping orders; it also contains the steam heating apparatus. (The entire building is heated by steam.) The second story is intended for offices, which are light and well arranged. Mr. Gasser's place at Rockport contains some 40,000 feet of glass. He is experimenting with oil for fuel, combined with slack coal and natural gas. It works very well.

J. C. Gooding has built an entire new range of houses on Doane street, near Wade park, the past summer. They are intended entirely for roses, and are heated by steam. Three houses are about 100 x 20, and three are 100 x 12 feet; a neat, attractive and compact establishment.

Congratulations to Mr. and Mrs. Harry Jaynes are now in order.

E. G. CAMPBELL.

## GRAFTED AND OWN ROOT ROSES.—

The experiment of Mr. F. F. Smith of Normal Park, Ill., with two lots of Niphetos planted side by side—one lot grafted and the other on own roots—shows so far a decided advantage with those on their own roots, they showing better foliage and much heavier and a better quality of bloom than the grafted plants. Both lots are receiving identical treatment. Mr. Smith, however, has some grafted Gloire de Dijons which are doing much better on Manetti stock than on own roots.

## All Garden Supplies.

## STOCK FOR FLORISTS.

## PLANTS BY MAIL, POSTPAID.

Plants for ONE DOLLAR, well established, pot grown. *Send Arrival Guaranteed.*

8 Abutilon Thompsoni, double flowers, free blooming.....	\$1.00
8 Akebia Chinata, hardy climber.....	1.00
8 Acalypha Muscad, handsome decorative foliage.....	1.00
8 Albarranda Schottii, lovely yellow tubular flowers.....	1.00
8 Ampelopsis Vittata, hardy creeper.....	1.00
8 Asparagus Tenissimus, the new similar.....	1.00
8 Azulen Alba, best single white for florists.....	1.00
8 assorted kinds, all plants.....	1.00
8 Begonia Brumati, white flowered, ever bl'm'g.....	1.00
8 " Rex varieties, ornamental foliage.....	1.00
8 " Glaucophylla Saunders, salmon colored, drooping habit.....	1.00
8 Cape Jessamine, Florida, double, white flowers, fragrant.....	1.00
8 Cape Jessamine Radicans Variegata, flowers double white, foliage var.....	1.00
8 Camellia Japonica alba perfectly variegated.....	1.00
8 " assorted colors.....	1.00
8 Cestrum Parqui, night-blooming Jessamine.....	1.00
8 Cissus Discolor, foliage beautifully variegated.....	1.00
8 Campsidioid Filicifolium, fern-like climber.....	1.00
8 Coleus for 1888—John Goode, Yellow Jacket, Mikado, Tokio, Kressi, Harry Harold, Norwich, Park Redder.....	1.00
8 Daphne Odorata, flowers white, foliage very fragrant.....	1.00
8 Ficus Repens, miniature greenhouse climber for covering.....	1.00
8 Hibiscus, in five kinds.....	1.00
8 Hydrangea Rosa, the new rosy pink.....	1.00
8 " Thomas Hoge, white flowered.....	1.00
8 " Ramosus Picta, new.....	1.00
8 Ipomoea Grandiflora—Moon Flower.....	1.00
8 Impatiens Sultan, carmine flowers, ever-blooming.....	1.00
8 Impatiens Mariana, foliage variegated.....	1.00
8 Jasminum gracillimum, white, distinct and graceful, ever-blooming.....	1.00
8 Jasminum Catalonian, white, fall and winter blooming.....	1.00
8 Jasminum, yellow flowered.....	1.00
8 Leonon Verbena, foliage sweet scented.....	1.00
8 Lycopodiums, four kinds.....	1.00
8 Lagerstromia Indica, Crape Myrtle, pink flowering.....	1.00
8 Meyenia Erecta, flowers blue, yellow throat.....	1.00
8 Passiflora C. Elliott, white flowered, hardy.....	1.00
8 " Grand folia Variegata, foliage var.....	1.00
8 Plumbago Capensis, flowers light blue.....	1.00
8 Rhynchospermum Jasminoides, flowers white, sweet-scented, in clusters.....	1.00
8 Rusellia Juncea, flowers coral, weeping.....	1.00
8 Stevin Serrata Nana, dwarf.....	1.00
8 " Variegata, foliage variegated.....	1.00
8 Thunbergia Fragrans, climbing, flowers white.....	1.00
8 Torenia Asiatica, flowers blue.....	1.00
8 Roses, Bon Silence, M. Niel, Adam, C. Cook, Perle des Jardins, Safrano, Niphetos, Ball, Bell Greville, Queen of Frannies.....	1.00
One Collection, 8 plants, by mail postpaid, \$1.00 Six " 48 " " " 5.00	
Thirteen " 104 " " " 10.00	

Send either postal note, money order, checks, bills, or stamps. Address

ROBT. J. HALLIDAY,

SEEDSMAN AND FLORIST,

BALTIMORE CITY, MD.

## NEW PLANTS.

ZOCHER & CO., Nurserymen and Florists,

HAARLEM, HOLLAND.

Will be pleased by receiving catalogues of new fruit and ornamental trees, shrubs, plants and seeds.

# ATTENTION!! REDUCTION IN PRICE.

## PURITAN—"THE EVER-BLOOMING NABEL MORRISON."

Plants in 3-inch pots, averaging from 10 to 12 inches in height, \$35.00 per hundred; 50 cents each in small quantities.

## MRS. JOHN LAING—The Grandest of Pink Hybrids,

As near ever-blooming as a Hybrid can be. Fine dormant plants 18 to 20 inches high, \$50.00 per hundred.

**METEOR;** the darkest of Hybrid Tea Roses; a rich dark velvety red. Large plants in 4-inch pots, \$25.00 per hundred.

For particulars apply to

**CHAS. F. EVANS,**

108 S. 12th Street,

PHILADELPHIA, PA.

**Double White Primulas.**

Ready for flowering pots, \$10 and \$12 per 100, out of pots carefully packed.

**S. TAPLIN,**  
DETROIT, MICH.

**TOBACCO STEMS FOR FLORISTS,**

FOR SALE, packed in  
bales 200 to 250 lbs.

NO CHARGE for delivery  
to depots.

PRICE:

From \$8 to \$10 per ton,  
according to quantities.

ADDRESS

**P. C. FULWEILER,**  
716 Arch Street, PHILADELPHIA, PA.

**DOUBLE PRIMROSES.**

**Extra Large**

**CANE STAKES FOR ROSES.  
ROSES.**

BRIDE, DUKE,  
NIPHETOS, PERLE,  
BENNETT, LA FRANCE,

And others. All grown from selected wood for  
bench planting.

Send for SUMMER TRADE LIST.

**GEO. W. MILLER,**

(Successor to Miller & Hunt.)

WRIGHT'S GROVE, CHICAGO.

Mention American Florist.

**OUR NEW TRADE  
DIRECTORY**

Contains over

**6,000 Names of (Live)**

Florists, nurserymen and seedsmen, in the United  
States and Canada.

**PRICE ONLY ONE DOLLAR.**

AMERICAN FLORIST CO., Chicago.

**CARNATIONS.**

We offer to the trade very strong plants, including  
the following varieties:

HINZE'S WHITE, SNOWDON, DeGRAV,  
PHILA., PORTIA, LA PURITE,  
C. KING, CHESTER PRIDE, &c.  
PER 100, \$10.00.

Address,

**BRENNEMAN & PETERSON,**  
HARRISBURG, PA.

**My WHOLESALE AND DESCRIPTIVE Catalogues**  
for 1887, of Bedding Plants, Roses, Palms, Orchids,  
etc., mailed to all applicants. Large stock of the  
following on hand at cheap rates: *Ampelopsis Veitchii*, various sizes *Tea*, and *Hybrid*  
*Roses*, all the leading sorts, named *Chrysanthemums*, *Dracæa Indivisa*, various sizes,  
*Echeverias*, *Small Ferns*, *Geraniums*, double and single, best named sorts, *Areca Lu-*  
*tescens*, in 2½, 4, 5, and 6-inch pots, *Lafania Borbonica*, *Seaforthia Elegans*, *Oreo-*  
*doxa Regia*, *Corypha Australis*. Other Palms, such as *Cocos Weddelliana*, *Cham-*  
*erops Excelsa*, *Phoenix Reclinata*, *Phoenix Rupicola*, *Phoenix Tennis*, *Kentias* of  
sorts. *Glazinova Insignis*, fancy named *Clematis*, and other vines, etc. Prices given  
on application.

**WM. C. WILSON, FLORIST,**

Steinway's, Astoria L. I.



**Rare Japanese Shrubs,**

**PALMS, BAMBOOS,**

**Orchids, Ferns and Fruit Trees.**

**35 VARIETIES LILY BULBS.**

We mail free for \$1.00 5 choice Japanese Lily Bulbs,  
or 3 choice rare Chrysanthemums.

13 Mammoth Japanese Chestnuts for 50c.  
All our stock is raised carefully in our nurseries  
in Japan. CATALOGUES FREE.

**H. H. BERGER & CO.,**

Proprietors of GEORGE SILVESTERS' SEED HOUSE,  
P. O. Box 1501. 315 & 317 Washington St.,

SAN FRANCISCO, CAL.

**FOR SALE.**

**ADIANTUM FARLEYENSE**

In 5-inch pots, \$15.00 per doz.; \$100.00 per 100.

PETER FISHER, Montvale, Mass.

**CLEMATIS CRISPA.**

**FOR SALE**

By the Hundred or Thousand.

H. STEINMETZ, RALEIGH, N. C.

**SURPLUS STOCK OF CARNATIONS**

Snowdon, Crimson King, Beauty, Chester Pride,  
and Lady Emma. Small, but good healthy plants,  
at \$5.00 per 100. Also Cut Carnation Bloom for sale.

Address **ISAAC LARKIN,**  
Toughkenamon, Chester Co., Pa.

We can now furnish in any quantity desired Debit and Credit Tickets of which  
we give below full size samples.

**DEBIT.**

188

**CREDIT.**

188

The debits are printed in black and the credits in red, so they can be readily distinguished. They are put up in blocks of 100; 50 of each, placed  
back to back; thus but one block will have to be carried. By means of these tickets an entry of a sale or receipt of goods can be made anywhere—in  
the house or in the field—and afterwards filed. Tickets for each transaction in your business will make data from which a book-keeper can readily  
work. With this simple and easy means of keeping a record of your business can you afford to neglect so important a matter?

Price of Tickets, postpaid, 100, 20c.; 200, 35c.; 300, 50c.; 500, 75c.; 1000, \$1.40.

**AMERICAN FLORIST COMPANY,**

54 LA SALLE STREET, CHICAGO.



## New Ivy-Leaved Pelargoniums.

On several occasions during August and September, Mr. R. Owen, of the Floral Nursery, Castle Hill, Maidenhead, has exhibited blooms of his two very fine double Ivy-leaved pelargoniums, *Souvenir de Charles Turner* and *Robert Owen*. These and some others were obtained by Mr. Owen from a cross between Mr. George's Masterpiece, a fine single variety, and *Comtesse Horace de Choiseul*. It is difficult to imagine any improvement upon the two fine new varieties above named. *Robert Owen* is perfectly double, being in color bright rosy cerise with a flush of magenta; the flowers when fully developed are large and very full. *Souvenir de Charles Turner* is much in the same way, yet quite distinct, and also finely double. Both these surpass any other double-flowered variety I am acquainted with in regard to their brilliant colors, large size, fine shape, and symmetry of appearance. Another from the same cross has been named *Prince of Wales*; it is also a very fine double variety, the color rosy purple, flushed with crimson, and the blossoms produced in fine trusses. *Jubilee* is of a rosy cerise color, flushed with magenta. Other seedlings came from the cross, but these were the most striking up to date. A fine continental-raised variety also claims notice, the flowers of a rich bright rosy cerise color. All the varieties I have described appear to be of bold and vigorous habit, and I think that lovers of Ivy-leaved pelargoniums will find these well worthy of attention.—*R. D., in London Garden.*

**GREENHOUSE HEATING.**—We would be grateful for any suggestions from those who have had experience in regard to heating greenhouses full of hot house plants during winters in such a climate as this (S. Florida) when the thermometer is liable to sink as low as 38° or 40° occasionally (or 28° as in Jan., 1886) with now and then a frost, without going to the expense of boilers, etc. Can oil stoves be improved upon?

Manatee, Fla. E. N. REASONER.



## Florist's Letters

Patent applied for. These letters are made of the best immortelles, wired on wood or metal frames with holes to insert toothpicks.

## Prices on Wood Frames:

2-in. Purple.... Per 100 \$3.00  
Less than 100, 25c.

2 1/4-in. Purple.... Per 100 \$4.00

Send for sample. Postage 10c. per 100. Script lettering on Metal Frames any word, 8c. per letter.

## Designs, Monograms, etc.

W. C. KRICK,  
1107 Broadway, Brooklyn,  
N. Y.

J. C. VAUGHAN, Chicago,  
Agt. west of Pennsylvania.

## RHODODENDRONS

Being the representatives in the U. S. for Messrs.

Jno. Watterer & Sons,

The great English Rhododendron growers, we are prepared to furnish Rhododendrons of all sizes and in any quantity, at prices lower than ever before offered in this country. Orders now solicited for spring delivery. Prices on application.

B. J. ELLIOTT CO. Pittsburgh, Pa.

## M. M. BAYERSDORFER &amp; CO.

56 N. 4th Street, Philadelphia, Pa.,

Manufacturers and Importers of

## Baskets &amp; Florists' Supplies

NEW CATALOGUE READY,  
and sent free on application.

## SASH BARS.

IN EITHER PINE OR CYPRESS.



We carry a large stock in  
12, 14 and 16 foot LENGTHS, at  
\$1.65 per Hundred Ft. f.o.b.  
CLEAR CYPRESS \$2 per 100 ft.  
1st & 2d Cypress \$1.65 "

## VENTILATORS

Made to Order. Write for  
Estimates.

JOHN L. DIEZ & CO.,  
530 to 534 N. Halsted St., CHICAGO.

## INDESTRUCTIBLE BENCHES

Can be made by using

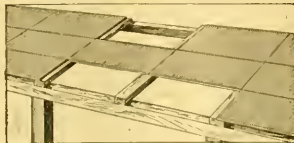
## SLATES

THEY ARE AS

Cheap as Wood

—AND—

Every way Better



They will last a lifetime and you will not be troubled with fungus from rotting wood. They transmit bottom heat better than wood.

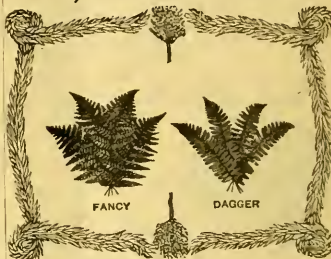
Price, \$22.50 for 1,000 sq. feet of surface.

SLATES 1-3 IN. THICK, 20, 22, 24 INCHES LONG.

## AGENTS:

NORTHERN NEW JERSEY, JOHN N. MAY, Summit N. J.  
NEW YORK AND NEW ENGLAND, SIEBRECHT & WADLEY, 409 Fifth Ave., N. Y.  
FROM PITTSBURGH WEST, J. C. VAUGHAN, 42 La Salle St., Chicago.  
CRAIG & BRO., 49th and Market Streets, Philadelphia, Pa.  
CHAS. S. PRICE, Lansdowne, Pa.

## 500,000 CUT FERNS



These Ferns are from 10 to 15 inches long, of a beautiful dark green, and will keep for several weeks. They are used for

BOUQUET AND BASKET WORK, FILLING VASES,  
DECORATING CHURCH ALTARS, ETC., ETC.

Are preferred by many to Smilax.

\$1.50 Per Thousand Ferns.

## 1000 BBLs. BOUQUET GREEN

Barrel or Sack of 30 lbs.....\$ 2.00  
100 lbs..... 6.00  
1,000 lbs.....\$55.00; 2,000 lbs..... 100.00

## 25,000 Yds. Wreathing or Roping.

This Roping is all made from First-Quality BOUQUET GREEN wound with fine wire in thorough manner. Having used all kinds of material for Roping I have discarded them all and now use nothing but Bouquet Green. Reasons why it is the BEST: 1. It is the handsomest material nature produces. 2. It will stand the roughest kind of usage. 3. It will hold its color. 4. It will not shed or drop.

## Wholesale Price.

Per yard  
3-inches diameter, flat or one-sided.....\$ 10 to 15 cts.  
" round with cord in center..... 5  
4-inches " round with cord in center..... 8  
5-inches " round, on heavy cord..... 10 "



## 10,000 Christmas Trees

FROM 3 FT. TO 30 FT. HIGH.

Fresh from the beautiful Berkshire Hills of old Massachusetts, where the finest shaped trees in the world grow.

Wholesale price of CHRISTMAS TREES put on cars at Hinsdale, Mass. If shipped from New York City add one-half to these prices:

Each.	Each.
4 to 5 ft. high.....	\$ 10 to \$ 15
6 to 7 ".....	20 to 30
8 to 9 ".....	40 to 50
10 to 11 ".....	60 to 75
12 to 13 ".....	80 to 100
14 to 15 ".....	1.25 to 1.50
16 to 17 ".....	1.75 to 2.00
18 to 20 ".....	2.40 to 3.00
25 to 30 ".....	4.00 to 6.00

TREE FEET of all sizes. 18-in. square, pyramid, four blocks high, soc. 15-in. soc. 12-in. three blocks high, soc. 9-in. soc. Crosses 18, 24, 30, 36, 42, 48, 60, 72 inches one cent an inch including braces, all painted two coats green.

SPHAGNUM MOSS, \$1.00 per Bbl., 6 Bbls. for \$5.00.  
GOODS SHIPPED TO ALL PARTS OF THE U. S.

L. B. BRAGUE,  
HINSDALE, MASS.

After Dec. 5th at the Old Stand, 47th St. and Lexington Ave., N. Y.  
Terms Cash, or 30 days approved credit. All bills must be paid on or before January 1st, 1888.

## ORCHIDS.

Their structure, history and culture (illustrated); by L. CASTLE.

This most instructive and practical work will be sent gratis, with our

### Amateur's Collection

of TWELVE ESTABLISHED ORCHIDS, blooming at different seasons, beautiful varieties, of easiest culture, for \$10.00.

Catalogue full of information on orchids free on receipt of 2c. stamp.

BRACKENRIDGE & CO.,  
GOVANSTOWN, Baltimore Co., MD.

## ORCHIDS.

20,000.

In all the good flowering sorts, at moderate prices. Cut blooms at all seasons.

Send for catalogue.

W. M. MATHEWS,  
Utica, N. Y.

## \* FERN. \*

Fine Stock of best varieties for cutting from for cut flower work. All the best new and old varieties of

ADIANTHUMS AND PTERIS.

\$8.00 A HUNDRED.

ALL IN FINE CONDITION.

GEO. WITTBOLD,  
Wright's Grove, CHICAGO.

## CARNATIONS.

CUT BLOOMS OF

BUTTERCUP, CENTURY, GRACE WILDER, SEAWAN, PORTIA AND CHESTER PRIDE,

On stems from four to six inches long, at \$2.00 per 100. The run of the beds, long and short stems at \$1.50 per 100. All short stems at \$1.25 per 100. Standing orders for the winter will be accepted.

CHAS. T. STARR, Florist,  
AVONDALE, CHESTER CO., PA.  
(Carnation Grower.)

### FOR CHRISTMAS DECORATION.

MOUNTAIN LAUREL (Kalmia latifolia) glossy dark green leaves, fine for decorating, will last for months; short; ready for use. Per large dbl. \$1.00. Sample free.

G. B. BELL,  
FRANKLIN, PA.

### 50,000 TUBEROSE BULBS

FOR SALE THIS FALL

PEARL, EXCELSIOR PEARL, AND OLD DOUBLE.

First-class, 4 to 6 inches, \$12.50 per thousand. Second-class, 4 to 4 inches, 10.00 "

Send address to

JAMES M. LAMB,

SUNNYSIDE, FAYETTEVILLE, N. C.

## NEW COLEUS FOR 1888.

ALL FLORISTS SHOULD HAVE THEM.

Harry Harold and the Mikado..... 15 cents each.  
Tokio and Yellow Jacket.....  
Nonesuch and Purple Prince.....  
John Goode, the Chicago bedder, doz. 75c.; each 10c.  
The set by mail, \$1.00, two of a kind, \$1.50; per doz. \$1.00. Express, \$10.00 per 100. Descriptive circular on application.

THOS. G. HAROLD,  
KINGSTON, Somerset Co., MARYLAND.

J. W. DUDLEY & SON,  
PARKERSBURG, WEST VA.  
— Write for prices on —

VERBENAS, GERANIUMS, COLEUS,  
WHITE CAP AGERATUMS,  
METALICA BEGONIAS.

## ORCHIDS.

The largest stock in America of Orchids for Cut Flowers.

### Special Offers.

SIEBRECHT & WADLEY,  
409 Fifth Avenue,  
Rose Hill Nurseries, NEW YORK.

## PALMS.

LARGEST AND BEST STOCK

— OF —

PALMS for DECORATIVE PURPOSES

In the world, not excepting Europe:

PRICES LOW.

Siebrecht & Wadley,  
409 FIFTH AVENUE,

NEW YORK.

PLANTS, SEEDS AND BULBS

## FINK & CO.

Postoffice Box 484,

City of Mexico.

## SMILAX.

1,000 Strong Plants from 3-inch pots,  
\$4.00 per hundred.

EVENDEN BROS.,  
WILLIAMSPORT, PA.

## DO YOU BUY

CARNATIONS, VERBENAS, COLEUS,  
GERANIUMS OR BEGONIAS?

PLANTS OR ROOTED CUTTINGS AFTER JAN. 1st.

Good varieties true to name. Good plants well packed, at low prices.

ORDER NOW FOR SPRING DELIVERY.

Correspondence solicited.

PANSIES AFTER MARCH 1.

ALBERT M. HERR,  
Lock Box 338, LANCASTER, PA.

Mention American Florist.

## VERBENAS.

\* MAMMOTH SET. \*

Also some of the BEST Old Sorts, transplanted on hedges.....\$10.00  
Rooted cuttings..... 5.00  
Pot plants, ready Nov. 1st.....\$5.00 per 100.

WM. DESMOND, Kewanee, Ill.

### FOR SALE.

Hydrangea Thos. Hoag and Oakus, 3-inch.....\$ 3.00  
White and Pink Double Bonarda, 4-inch..... 12.00  
Alternanthera, best red and yellow..... 4.00  
Geraniums, best named kinds..... 3.00  
Best Coleus..... 3.00  
Pelargonium, QUEEN VICTORIA..... 5.00  
Dracena Indivisa, 5 and 6-inch..... \$2.00 per doz.  
All fine plants. See my Chrysanthemum show, and select from plants in bloom, the kinds you want next year.  
W. T. BELL, Florist, Franklin, Pa.

## Seasonable Plants.

## PALMS, =====

## ===== FERN. =====

We have in splendid condition a full stock of the above in all sizes and varieties; well grown. Buy the stock now for Christmas and other decoration.

PRICE LIST free on application.

HENRY A. DREER,

PHILADELPHIA.

## ZIRNGIEBEL'S

Imported Giant Trimardeau Pansy

Unsurpassed as a Market Variety.  
Trade packages, 1,000 Seeds, \$1.00. Also Bugnot's Fancy Strain, the finest in existence. Trade packages, 500 seeds, \$1.00.

DENYS ZIRNGIEBEL, Needham, Mass.

## SPHAGNUM MOSS,

Especially for Florist use, \$2 per bale. Peat \$1.25 per bale. Sheet or Log moss, \$2 per bbl., Pitcher plants, a Wisconsin novelty, \$2 per doz.  
Lycopodium in its season at lowest prices per bbl. or ton.

Z. K. JEWETT, Sparta, Wis.

### FOR SALE.

Swanley White Violets, \$3.00 per 100; \$25.00 per 1,000.  
Marie Louise.....per 100, \$2.50  
Large Flowering Mixed Pansy plants, per 100, \$1.00; per 1,000, \$8.00  
Also about 5 lbs. of the finest double yellow and white Hollyhock Seed cheap, or will exchange for other seed.

M. TRITSCHLER & SONS, Florists,  
NASHVILLE, TENN.

TO THE TRADE ONLY,

My New Special Offer of

## EXTRA CHOICE FLOWER SEEDS

Is published now, and may be had on application.

FRED ROEMER, SEED GROWER,  
QUEDLINBURG, GERMANY.

PANSIES ONLY! The grandest collection ever offered, including ALL the latest NOVELTIES. Our Seed is warranted to be FINE, PURE and strictly FIRST CLASS. Send for Free Circular and Special Price List to the Trade.  
ALBERT BENZ, Douglaston, N. Y.

## HIGLEY'S TRADE LIST OF SEEDS, PLANTS, BULBS

### AND FLORISTS' REQUISITES

Now out. If you do not receive one, send for it. Address

HENRY G. HIGLEY,  
CEDAR RAPIDS, IA.

## THE NEW ROSE-COLORED VIOLET Mme. Millet.

A first-class novelty; perfectly healthy; very profuse flowering, and sweeter than any in cultivation.  
PRICE, 3-inch pots, each 40c.; doz. \$3.00; 100 \$15.00.

J. COOK, 318 CHARLES ST.,  
BALTIMORE, MD.

### OUT WITH THE LATEST!

## CARNATION - CULTURE

No Carnation Grower should be without this book. The only standard work in Europe or America, and is recognized as authority on this important plant Price, \$1.50. Table of Contents free.

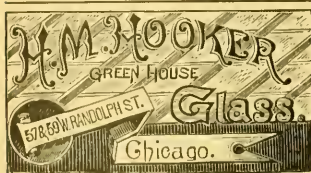
LORA L. LAMBORN,  
Box 592, Alliance, Ohio.



## Forcing Solomon's Seal.

Few subjects are more attractive than this hardy plant when forced into bloom early in the season, and in this stage the long, arching shoots, studded with their small drooping blossoms, are especially useful, not only from their beauty when the plants are grown in pots, but also for use in a cut state for furnishing vases and similar purposes. When required for forcing, the better way is to take up any established clumps that may be at hand and divide them up into single crowns, selecting only the strongest for growing under glass. The others may be again planted out in a prepared bed, and will then after another year be available for the next selection. Very useful little specimens may be formed by potting seven or eight of the crowns in a pot six inches in diameter, and placing them at such a depth that the top of the crown is about an inch below the surface. After potting they may be placed out of doors, and covered sufficiently deep with ashes to keep out the frost till the new year, when they may be forced gradually into bloom. The same treatment as that given to the lily of the valley also suits Solomon's Seal, but fully developed shoots cannot be had so early in the season as can the flower-spikes of the lily. From the time forcing commences the soil must be always kept moist, as dryness is very injurious to the growing plants. The crowns should be potted as soon as the shoots have died down (which in most cases will be about the present time), as then the roots will have a period of activity before they are taken into the forcing house. As the display depends to a great extent upon the strength of the crowns that are available, a good way is to grow them especially for the purpose, and by liberal treatment in the matter of manure, and water when necessary, large, fully developed crowns, or eyes as they are often called, may be secured—*H. P., in London Garden.*

FLORISTS ARE HUMAN.—"The continual association with nature's choicest productions" does not prevent some florists from doing their share toward creating material for sensational news items. We note by the daily press that a florist in Denver endeavored recently to emulate the untamed cowboy, and rode his horse through the window of a "red liquor dispensary"; near Philadelphia a florist eloped with his wife's sister; in the same state a private gardener gave the coachman two points and beat him in securing the hand of his employer's daughter; and in New York city a member of the craft endeavored to "mash" a lady, and secured "two lovely black eyes" for his trouble. The last-named party will undoubtedly now be able to give us points on the "origin of black spot."



ALL SIZES OF SINGLE AND DOUBLE THICK

GLASS FOR GREENHOUSES.

ALL GLAZIERS' SUPPLIES.

Write for Latest Prices.



FOR THE TRADE.  
**FLORAL WIRE DESIGNS.**  
JAS. GRIFFITH,  
THE PIONEER MANUFACTURER IN THE WEST,  
305 Main Street, CINCINNATI, OHIO.  
SEND FOR WHOLESALE PRICE LIST.



## Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

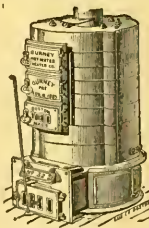
## GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

Mention American Florist.

L. Wolff Mfg. Co., 93 to 111 W. Lake St. CHICAGO

## GURNEY'S NEW HOT WATER HEATER.



THE CHEAPEST AND BEST FOR  
GREENHOUSES AND CONSERVATORIES.

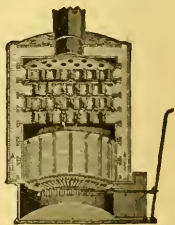
THE GURNEY HEATERS present more water surface to the direct action of the fire than any others (known to us) in use. They are the easiest to keep clean, and with due attention almost any kind of fuel may be used.

EASILY REGULATED.  
SIMPLE AND EFFICIENT.  
SAFE AND ECONOMICAL.

MANUFACTURED BY THE  
GURNEY HOT WATER HEATER CO.,  
237 FRANKLIN STREET, BOSTON, MASS.

JOHN A. FISH, Managing Director.  
SEND FOR PAMPHLET AND PRICE LIST.

SELLING AGENCIES.—M. H. Johnson, 110 Centre Street, New York. Rice & Whitacre Manfg. Co., 42 and 44 W. Monroe Street, Chicago (West and Southwest). T. R. Chase, 31 Edmund Place, Detroit, Mich. (for Michigan and Ohio). Wm. Gardiner & Co., Portland, Oregon.



## SASH BARS MADE OF CLEAR CYPRESS LUMBER.

Equal to Red Cedar in durability. Plain Bars  $1\frac{3}{4} \times 1\frac{1}{2}$  inches kept in stock. Price 2 cents per lineal foot. F. O. B.

Lockland Lumber Company, Lockland, Hamilton County Ohio.

HENDERSON, OF FLUSHING,  
SPEAKS ON GRAPE DUST.

Flushing, L. I., October 10th, 1887.

BENJ. HAMMOND,

Dear Sir:—Will you please send me 100 lb. keg of your GRAPE DUST. I have given the sample sent me a fair trial and like it very much.

Yours truly,

JOHN HENDERSON.

For Sample, send stamps to HAMMOND'S SLIG SHOT WORKS, Fishkill-on-Hudson, N. Y.

## Ives' Putty Machine.

Patented Jan. 8, 1887.

The best device ever invented for laying putty. With this you can make old leaky sash perfectly tight without removing the glass. It will do the work of five men in bedding glass.

Sent by Express on receipt of price, \$3.00.

J. H. IVES, DANBURY, CONN.

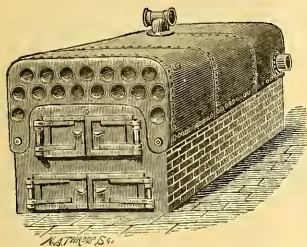


ESTABLISHED 1854.

## Devine's Boiler Works

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers.



Capacity from 350 to 10,000 feet of four-inch pipe.  
Send for New List.

**PETER DEVINE,**  
387 S. CANAL ST.,  
CHICAGO.

ESTABLISHED, 1866.

Floral Wire Designs,

Manufactured by

**N. STEFFENS,**

335 East 21st Street, NEW YORK.



## Conservatories

GREENHOUSES, ETC.

Erected in any part of the U. S. or Canada  
Glazed on the

Helliwell Pat. Imperishable System

OR WITH PUTTY.

For further testimonials, illustrated catalogue or  
estimates address

**JOSEPHUS PLENTY.**  
HORTICULTURAL AND SKYLIGHT WORKS.

Offices, 144 Pearl Street, NEW YORK.

**FOR SALE.**  
**THE CUTS**

USED IN ILLUSTRATING THIS PAPER.

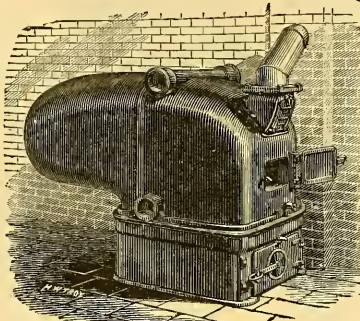
Write for prices on any which you have seen  
in previous issues and would like.

**AMERICAN FLORIST CO.**  
CHICAGO.

**HALES' MOLE TRAP**

For destroying ground moles in lawns, parks, gardens and cemeteries. The only PERFECT mole trap in existence. Guaranteed to catch moles where all other traps fail. Sold by seedsmen, Agricultural Implement and Hardware dealers, or sent by express on receipt of \$2.00 by H. W. HALES, RIDGEWOOD, N. J.

## Greenhouse Heating AND Ventilating



HITCHINGS &amp; CO.

233 Mercer Street, New York.

Ride Patterns of Boilers,  
Fifteen Sizes,  
Corrugated Ride Box Boilers  
Saddle Boilers,  
Conical Boilers,  
Base Burning Water Heaters  
Perfect Sash Raising Apparatus.

Send 4 cents postage for Illustrated Catalogue.

## SOMETHING NEW.

Our 3-Piece Mailing Box for Florists and Nurserymen.

Our boxes are the pride of the Florists, and  
are acknowledged by all to be the strongest, yet  
the lightest and desirably the neatest box made.  
We will send price list and sample box FREE.

**SMITH & SMITH,**  
KENTON, Hardin Co., OHIO.

10,000 ELECTROS.



Send for List of Catalogues.

THE

American Florist Company's

## ◦ DIRECTORY ◦

OF



( FLORISTS,  
NURSERYMEN,  
AND SEEDSMEN,

OF THE

UNITED STATES AND CANADA.

1887.

PRICE ONE DOLLAR.

The most complete and accurate list yet published. The key designates the particular branch of the trade each one is engaged in. The street and number of those living in cities will insure the delivery of tons of catalogues which have hitherto remained dead in the office to which they were addressed. At this low price every one in the trade can afford to have a copy for reference. Address

**AMERICAN FLORIST CO.,**  
54 LA SALLE ST., CHICAGO.



## Index to Advertisers.

Advertising Rates, etc.	139	Lamborn, Lora L.	147
Allen, W. S.	139	Larkin, J.	145
Baller, F. A.	143	La Roche & Stahl	139
Bayersdorfer, M. M. & Co.	145	Lee, D. & Son	141
Bell, G. S.	147	Lockland Lumber Co.	148
Bell, W. T.	147	McAllister, F. E.	143
Benard, E. Jr.	137	McCarthy, N. F. & Co.	139
Beniz, Albert	147	McFarland, J. Horace	141
Benger, R. H. & Co.	145	Matthes, Wm.	147
Biane, A.	149	Michel Plant & Seed Co.	141
Bloomington Nursery	142	Miller, Geo. W.	145
Bonte, Philipp	141	Monon Route	140
Brackenridge & Co.	141	Murdoch, A. M. & J. B.	139
Brague, L. B.	140	Myers & Co.	150
Carmody, J. D.	150	Pennek, Chas. E.	139
Cook, J. M.	147	Perkins, John J.	139
Centon, L. J.	137	Perkins, J. N.	141
Desmond, Wm.	147	Price, Joseph	146
Devine, Peter	149	Price, Charles S.	146
Diez, John L. & Co.	146	Reed & Keller	149
Dillon, J. L.	139	Rice & Whitacre Mfg. Co.	144
Deer, H. A.	141	Riemer, Frederick	147
Dudley, J. W. & Son	147	Rolker, Aug. & Sons	143
Elliott, B. A. Co.	146	Ross & Millang	139
Evans, Chas. F.	144	Schultheis Bros.	137
Exendon Bros.	147	Schulz, Jacob	137
Exeter Mach. Wks.	150	Scollay, John A.	140
Fassett, F. E. & Bro.	143	Sheridan, W. F.	139
Fink & Co.	147	Schrecht & Wadley	143
Fulweiler, P. C.	145	Siekman, J.	143
Gasser, J. M.	143	Siebert, W. F. & Co.	143
Giddings, A.	143	Situations, Wants, etc.	137
Goldman, M.	150	Smith & Smith	149
Griffith, Jas.	148	Spooner, Wm. H.	147
Grosvae, Henry	141	Starr, Chas. T.	147
Guernsey Heater Co.	148	Steffens, N.	149
Hales, H. W.	149	Steinmetz, H.	149
Halliday, Robt. J.	144	Stewart, Wm. J.	139
Hallock, V. H. & Son	143	Simson, E. A. & Co.	141
Hammond & Hunter	139	Strauss, C. & Co.	139
Hammond's Slug Shot	148	Taplin, S.	143
Harold, Thos. G.	141	Thompson, G. & Sons	142
Henderson, P. & Co.	142	Trudell, H. & Sons	147
Herr, Albert M.	147	Van der Schoot, R. & Son	143
Higley, Henry G.	147	Vaughan, J. C.	139
Hill & Co.	137	Weathered, Thos. W.	140
Hippard, E.	143	Welch Bros.	139
Hutchings & Co.	149	Whitdin Pottery Co.	141
Hooker, H. M.	147	Wilks, S. Mfg. Co.	150
Hurl, Freeman	141	Wilson, Wm.	145
Ives, J. H.	141	Witbold, Geo.	147
Jewett, Z. K.	147	Wolf, L. Mfg. Co.	148
Joosten, C. H.	143	Young, Thos. Jr. & Co.	139
Karr, Geo. A.	141	Zirngel, D.	147
Krug, James	146	Zoehrer & Co.	144
Krick, W. C.	146		
Lamb, Jas. M.	147		

BROOKLINE.—We know of no journal devoted to that subject.

EARLY SNOWS in the Michigan and Wisconsin forests are likely to shorten the supply of bouquet green for the coming holidays.

REPORT OF THE STATE HORT. SOCIETY OF THE STATE OF MISSOURI FOR 1886.—This report has reached us from Secretary L. A. Goodman, Westport, Mo. It contains 430 pages, and includes many essays of considerable value to all interested in horticulture.

## SOMETHING NEW — IN Heating Apparatus — FOR — GREENHOUSES.

Send for Illustrated Catalogue.

J. D. CARMODY,  
EVANSVILLE, IND.

### ATOMIZER & SPRINKLER



plants. Moistens them as if by a fog. Unexcelled for destroying insects. Fills instantly; it is impossible to describe here. Enclose stamp for illus. pamphlet and price to agents. Remember no stamp, no attention. M. GOLDMUN, Patentee, Pittsfield, Mass.

Delegates to the next convention will travel via the



E. O. McCormick, Gen. Passenger Ag't, Chicago.

Pullman Car Line  
TO AND FROM  
Louisville, Indianapolis, Cincinnati and the winter resorts of Florida and the South. For full information address



Sectional View.

Mention American Florist.



## HEATING APPARATUS FOR Greenhouses, Etc.

CAST IRON PIPE AND FITTINGS.

JOHN A. SCOLLAY,

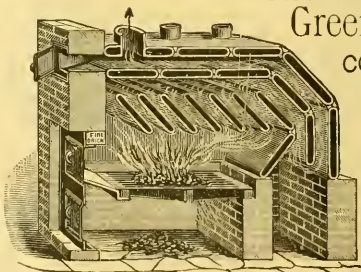
74 & 76 Myrtle Ave.,

Brooklyn, N. Y.



## Improved Hot Water Boilers

For Heating



Greenhouses, Graperies,  
CONSERVATORIES, ETC.

ALSO

Cast Iron Pipe, Fittings, Valves and  
all Material for Heating by  
Hot Water.

Send for Catalogue.

MYERS & CO.

1173 So. 9th St.,

PHILADELPHIA.

## GREENHOUSE HEATING

BY STEAM, BY HOT WATER, BY COMBINATION STEAM AND WATER.

EXETER MACHINE WORKS,  
19 FEDERAL ST., BOSTON, MASS. WORKS EXETER, N. H.

### THE CELEBRATED WILKS WATER HEATER!



For Heating  
GREENHOUSES,  
DWELLINGS,  
POULTRY HOUSES,  
STORES, BATH TUBS,  
ETC., ETC.

Send for Price List.

S. Wilks Mfg. Co.,

Cor. Monroe & Clinton Sts., Chicago



Makes it air and water tight. No breakage from frost. Saves fuel and glass.  
FLOREST WATKINIAN, for Flues and Hot Water, \$10.00; for Steam, \$5.00. It will ring a bell when the temperature changes, and ring when the steam goes down.

J. M. GASSER.

71 Euclid Avenue, CLEVELAND, OHIO.  
Mention American Florist.

# THE AMERICAN FLORIST



America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. III.

CHICAGO AND NEW YORK, NOVEMBER 15, 1887.

No. 55.

## THE AMERICAN FLORIST

Copyright, 1887, by American Florist Company.  
Entered as Second-class Mail matter.  
Published on the 1st and 15th of each month by  
**THE AMERICAN FLORIST COMPANY.**  
GENERAL OFFICES, 54 La Salle Street, Chicago.  
EASTERN OFFICE,  
Room 81, Vanderbilt Building, New York.  
All communications should be addressed to the  
general office at Chicago.

SOCIETY OF AMERICAN FLORISTS.—E. G. Hill, Richmond, Ind., president; John N. May, Summit, N. J., vice-president; M. A. Hunt, Terre Haute, Ind., treasurer; Wm. J. Stewart, 67 Bromfield street, Boston, Mass., secretary. The fourth annual meeting at New York, Aug. 17, 18, 19, 1888.

### What the National Society is Doing.

We have been requested by several correspondents to specify any advantage to be gained by becoming a member of the Society of American Florists. With no disrespect to these gentlemen, we cannot but express surprise that any member of the craft who is possessed of ordinary intelligence can fail to see what a noble work the society is doing. It is collecting together the scattered and varied interests of the craft in such a way that they are enabled to make their influence felt, as a whole, in a way they could never do individually. It is ennobling the whole trade. It is obtaining for the craft a recognition from society in general as to the importance of the trade. It is thoroughly advertising every florist in the land, and thus making money value for all—members or otherwise. It is thoroughly diffusing knowledge of the most advanced methods of culture; knowledge which is worth hard cash to every one who properly applies it. More can be said, but this paper is not large enough to hold it all. Can you or any other florist afford to stay out of such a society? Can you consistently stand to one side and watch the procession go by without falling into the ranks? We think not.

SUBSCRIPTIONS for the AMERICAN FLORIST may be left with any of the following:

Baltimore,  
R. J. Haliday.  
Boston, W. J. Stewart.  
Buffalo, Daniel B. Long.  
Cincinnati,  
Harry Sunderbruch.  
Cleveland, O.  
Mrs. E. G. Campbell.  
Detroit,  
J. Breitmeyer & Sons  
Hankton, Ont.,  
Webster Bros.  
Harrisburg, Pa.  
J. Horace McFarland.  
Louisville,  
George Thompson & Sons.  
New Orleans,  
H. A. Despommier.  
Philadelphia,  
Edwin Lonsdale.  
New York, W. S. Allen,  
Aug. Rolker & Sons.  
C. H. Joosten.  
Pittsburgh,  
J. R. & A. Murdoch.  
St. Louis, Mibel Plant  
& Seed Co.  
San Francisco,  
Thos. A. Cox & Co.  
Toronto, Ont.,  
J. A. Simmers.  
Washington, D. C.,  
L. Schmid & Sons.

## Chrysanthemum Show.



### The New York Chrysanthemum Show.

The New York Horticultural society has scored a big success. After a good deal of hard work and a certain amount of anxiety, they have produced a show recalling the palmy days of Madison Square Garden when they used to turn that desolate caravansary into a tropic jungle.

The center point of the show must, of course, be the chrysanthemums, but the interest was not confined to this class of plants. There were some good orchids and some fine decorative plants. The judges had rather a difficult job to decide on the merits of the best flower in the exhibition, but they finally settled on Troubadour, a large fluffy Japanese. There were others that excelled it in size, but not in general excellence. All the prize winners of the New Jersey show were there, and a further study of their merits increases the favorable impression made there.

Julius Scharff took first prizes for cut blooms in six classes. Peter Henderson was winner of the prize for new varieties introduced since 1885, and also for largest and best display of named kinds. Some of his new varieties were of very great merit, notably a rich ox-blood red, John Welsh.

The baskets and vases filled with chrysanthemums and ferns cannot be very highly praised, and the bouquets of the same flowers were very poor; they were like nothing on this earth so much as Derbyshire birch besoms, being built on the same model.

The prize for plants in pots was again taken by Geo. McClure. The specimen Chinese was shown by Wm. Tricker; Japanese and single flowered by Geo. McClure; pompon, John Dallas.

The prize standards were shown by Geo. McClure. Among the many unique varieties shown by this exhibitor was Leopard—mauve, strangely spotted with

pure white. Another mauve seedling of note is Volunteer. Mrs. John Pettit is a terra cotta seedling of Mr. Spaulding's, chiefly noticeable for the way the petals were whorled; the heart of the flower being turned in an opposite direction from the outer ring. Dragon's Head was a pale pink with oddly notched petals; Robt. Bottomly is a big white, very noticeable. Of course G. F. Moesman and Mrs. Frank Thompson were there, as big and noticeable as ever.

Messrs. Siebrecht & Wadley showed a fine collection of orchids, for which they received first prize. Their plant of Cypripedium Spicerianum was especially noteworthy, being a fine variety. Cattleya aurea was good, and so was Calanthe vestita alba. There was a nice plant of Oncidium Forbesii and some fine zygotropis.

A specimen of Adiantum Farleyense shown by John Dallas was worthy of special note; it was very large and beautifully grown. Vresia glaziova (the Fountain tree) was represented by a good-sized specimen; it is an oddity, though it can scarcely be regarded in the light of a professional beauty. George McClure was the exhibitor.

The best collection of cut flowers, outside of chrysanthemums, was shown by John Dallas, and included a good many very nice things.

The prize for dinner table decoration was taken by W. C. Wilson, with a plateau composed of roses, ferns, palms and small crotons; a very handsome thing. Mr. Wilson also took first prize for pair of bouquets, one being of Perles, the other of Mermets. Mr. Ivera, with Mr. Le Mout, took second prize for hand bouquets. The corsage bouquets shown by this exhibitor deserve special mention; they were beautifully arranged and contained very fine flowers.

Some very fine chrysanthemums exhibited by Judge Benedict were the more meritorious on account of their culture. They were grown outside, being merely protected by a canvas tent, but they compared favorably with greenhouse plants.

Carnation prizes were taken by John H. Taylor and John Jones. There were some fine roses from J. H. Taylor, John Henderson, John Jones, Peter Henderson and others. Mr. Taylor's Madame Cusiu were especially good; they appeared to have better substance than this rose usually shows. The rose awards were as follows: Perle des Jardins—J. H. Taylor, John Henderson; Papa Goutier—J. H. Taylor, John Jones; Bride—John Jones, J. H. Taylor; Niphetos—John Jones, J. H. Taylor; Mermet—J. H. Taylor, John Jones; Cornelia Cook—John Henderson; Mme. de Watteville—John Henderson, J. H. Taylor; Bou Silene—J. H. Taylor; W. F. Bennett—J. Jones, Peter Henderson; La France—John Jones; Puritan—



John Henderson, Peter Henderson; display of roses—John Henderson.

The best ten dracaenas were displayed by Siebrecht & Wadley; second, David Rose. Siebrecht & Wadley made the best display of palms, tree ferns, distinct ferns, ornamental foliage plants and crotoms. Their exhibit was a most attractive one.

Geo. Grant, gardener to Mrs. C. J. Osborn, exhibited some remarkably fine bunches of Barbarossa grapes, and Mr. Wilson gave us a sample of the mushrooms he grows under the benches. Both these displays were tempting to those who desired a more material feast than flowers. John Finn's decorative plants were handsome, and added to the effect of the hall. The display was altogether a more lavish one than we have been favored with for some time. Mr. Lockwood of Stanford had some seedling carnations; a rich pink one was especially fine.

The room decorations competing for the Langtry cup were three in number. The decorations were to be confined to plants only. Two of the exhibitors displayed a circular arrangement of plants around a center piece—in one case a palm, the other a cytotium. These central plants were beautifully massed about the base with lesser plants and orchids. The third of the entries gave more the effect of a room with some slight furnishing; a pretty basket or plateau of ferns stood on the table. The first prize was taken by John Finn, second by David Rose, third by Siebrecht & Wadley. While the winner of the first prize did not approach either of the others in value of the plants, the taste and suitability were much superior, and this gave him the greatest number of points. The competition was very keen.

The general verdict was that the cut flowers were unusually and exceptionally fine, while the lavish show of plants made the show an exceedingly handsome one. The entries for the Langtry cup had much to do with the effectiveness. There is no doubt that the show was a big success; the number of entries deserving certificates, outside of the regular premium list, was really unusual. It has done much to revive drooping faith in the society, and if we don't have a tremendous show in the spring—why, appearances are very deceitful.

EMILY LOUISE TAPLIN.

#### Chrysanthemums at Boston.

The annual chrysanthemum show of the Mass. Hort. society opened at noon on Wednesday, Nov. 9, under most favorable circumstances as regards weather, attendance and quality of exhibits.

The society has much reason to be proud of its show this year, for in almost every particular it was the best exhibition of the kind it has ever given. The quality of the plants was far beyond anything ever seen here, and it would be difficult if not impossible to excel the specimen cut flowers shown, either in size, variety or form. The premiums offered this year were larger than ever before, and this fact encouraged the growers to unusual efforts. With the exception of the usual fringe of fruit and vegetables about the sides and a small group of orchids and cut roses on the stage, the plants in competition for the special prize for twenty named plants in 8-inch pots were sufficient to fill the lower hall. The premiums in this class were \$100, \$75 and \$50, and were won by E. Fewkes & Son, W.

H. Elliott and E. W. Wood respectively.

Mr. Elliott's plants were equal and in some respects superior to those of Mr. Fewkes, but there was quite a number of duplicates. The exhibit of Sam'l Neil in this class was very prettily grouped. A lot of ten neat plants from Jos. Clark was well worthy of notice, being shapely and in very small pots. A plant of President Hyde in Mr. Martin's collection also attracted considerable attention.

The first premium for six Chinese was awarded to E. W. Wood. These plants were fine, but in very large pots. The same gentleman also took third on six Japanese, first on four pompons and first on display of fifteen varieties, the latter prize amounting to \$50—there was a splendid plant of King of Crimson in this collection. P. Melia's plants were as usual very luxuriant and showy, and, barring a tendency to overstaking, were hard to beat. He took first for six Japanese, second for six Chinese and second for display of fifteen plants.

E. Fewkes & Son made a large exhibit of plants, also Mr. Martin and Mrs. F. B. Hayes. In Mr. Fewkes' collection of six Japanese was a most superb plant of Enchantress. The best plants in Mrs. Hayes' collection were Bras Ronce and Golden Dragon. In single specimen plants the competition was brisk and the plants in the different classes were well worthy of the premiums awarded to them. On standards Wm. Martin took all the prizes. His plants were six to eight feet high with magnificent heads, regular in form, and loaded with flowers. Such standards have never been seen here before.

For specimen Chinese, P. Melia took first prize with a grand plant of Mrs. Sharpe. E. W. Wood second with Mrs. Forsythe. For specimen Japanese, E. W. Wood took first with Gloriosum; for specimen pompon the same gentlemen took first with Salomon, and for specimen anemone, first with Mrs. Gane. This last was a most superb plant, a perfect mass of flowers drooping almost to the ground on all sides. Mrs. Hayes was second on specimen anemone with a seedling very similar in appearance to Timbale d'Argent.

President Walcott was well represented by a superb lot of plants, which, however, were not intended for competition. Edwin Fewkes & Son showed a collection of twenty-one new varieties which he recently imported from Japan, and which are now flowered for the first time in this country. They excited much curiosity, and the flowers were of best quality but not different in any marked degree from the best varieties in our own market, with one exception, and in fact some were apparently identical with a number of old established favorites.

The various displays of cut chrysanthemums were of unusual excellence, and certainly superior to anything ever shown here before. For twelve cut blooms of Chinese the best were shown by E. Fewkes & Son, and Mrs. J. M. Woodice of Worcester. The most striking varieties in Mr. Fewkes' collection were Gen. Slade, Venus and Prince Alfred. In Mrs. Woodice's collection the best were Pietro Diaz, M. V. Morell, Cullingfordii and Golden Queen of England. It would not be out of place here to call attention to the fact that the lady here referred to raised all the flowers shown by her, in an ordinary dwelling house. The blooms shown were unusually large and fine.

The best specimens in Mr. Fewkes' display of twelve Japanese blooms were Ceres, Soleil Levant, Mad. C. Andiguier, M. Boncoz and Beante des Jardins. Mrs. Woodice showed among others, Mrs. C.

H. Wheeler, Edna Craig and Sunlight. C. H. Hovey also staged a good collection in this class. For best six cut blooms, E. A. Wood exhibited Christmas Eve, Mons. Freeman and other choice kinds. Mr. Fewkes' collection of six reflexed was fine, the only drawback being that the varieties shown were all of pale colors.

The contest over six Japanese blooms was sharp, and the individual flowers shown were truly magnificent. Most noticeable among them were Thunberg Daimio, President Arthur, Domination, Cullingfordii and Grandiflora from Mr. Fewkes, and Domination, M. A. Davis and Daimio from Mrs. Woodice.

In the mixed displays C. H. Hovey, E. Sheppard, Mrs. F. B. Hayes, E. Fewkes & Son, P. Melia, Mrs. E. M. Gill and E. A. Wood all competed. These were uniformly good. Among the seedlings shown by R. Wilson, Mrs. M. J. Plumstead, Geo. Seaverns and Dr. H. P. Walcott there were many meritorious ones. Some of Dr. Walcott's were grand, especially that marked E. G. a very large yellow flower, E. 1 white reflexed, E. 6 maroon and E. 14 rich pink and enormous in size.

The only orchids shown were from E. W. Gilmore. First and best among them was Vanda Sanderiana, bearing a spike of ten blossoms, in size of flower, marking, and in form, the finest variety of this orchid ever shown here. There was a beautiful specimen of Oncidium ornithorrhynchum, a Vanda cerulea and an assortment of cyripediums, oncidiums, etc. Mr. Gilmore also showed some blooms of tuberous rooted begonias which were very fine.

Norton Bros. exhibited six vases of choice roses, and a splendid seedling carnation called White Gem was shown by Geo. E. Buxton of Nashua, N. H. This carnation is pure white, very large and full, and is a seedling from Scarlet Gem, crossed with Snowball. Mr. Buxton has tested it for two years. He describes the plants as being very dwarf in habit, not over fifteen inches in height, and requiring no pinching back.

WM. J. STEWART.

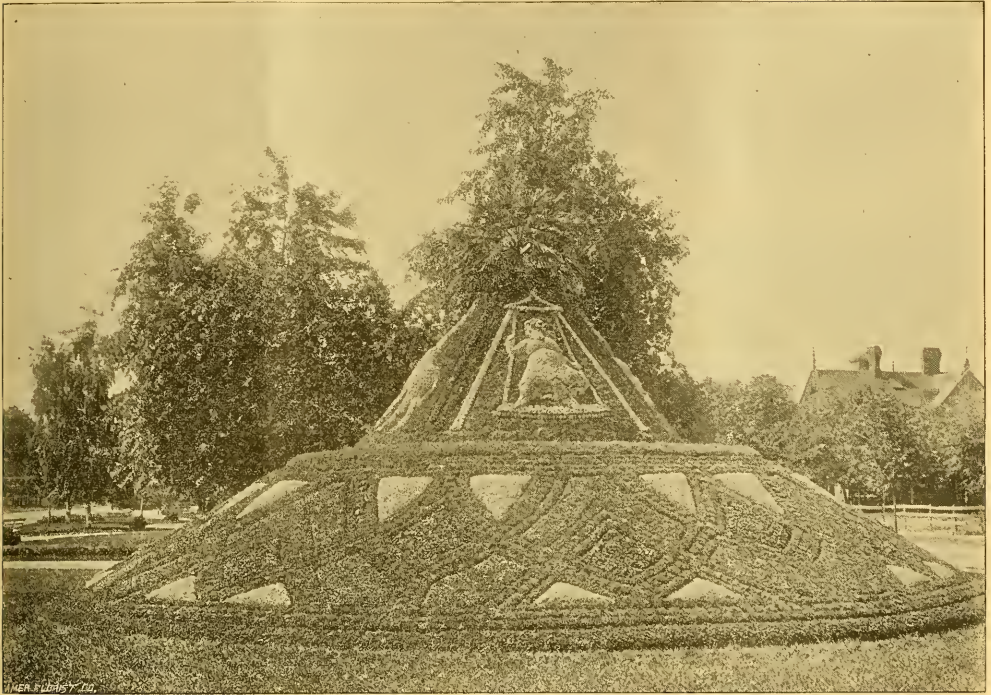
#### Chicago Parks.

In this issue we present another view of the mound on Drexel boulevard. The girl and swing were of echeverias on a ground of Sedum acre. In addition to the general description given in last issue, we might state that at the ridge seen midway between the apex and base of the mound is a narrow foot path for the use of workmen while trimming the plants. A diagram of the plants used in the lower part of the mound appeared in our last issue, but for convenience in reference we give it again herewith:



KEY TO DIAGRAM.

1. Alternanthera paronychioides major.
2. Variegated sweet alyssum.
3. Alternanthera paronychioides.
4. Oxalis tropaeoloides.
5. Alternanthera paronychioides.



THE MOUND, DREXEL BOULEVARD, CHICAGO: VIEW FROM THE NORTH.

#### The New Jersey Chrysanthemum Show.

The first chrysanthemum show of the season was that held at Brick Church Nov. 2 to 4. We all expected a good deal after the splendid exhibition they gave here last year, and there was certainly no reason for disappointment.

This was purely a chrysanthemum show. There were some few cut roses and foliage plants, but the orchid family was represented by one sad and lonesome zygopetalum only. Still, we can hardly complain on this score; the chrysanthemums were the object of the show, and undoubtedly the strong attraction. All the old favorites were there, but naturally most interest was felt in the direction of the novelties. The Spaulding prizes, six in number, awarded for new seedlings, have called out a lot of promising infants. Nos. 1, 3 and 4 of the series were carried off by Richard Brett, his winners being Country Club, Elizabeth Bliss and E. S. Renwick. No. 2 was secured by Frank Rose with seedling Chas. Pratt. The fifth and sixth premiums in this class were won by George McClure, gardener to Mr. Spaulding. These prizes are awarded by Mr. Spaulding with the understanding that all stock of prize winners is to become his property; the growers are to have the privilege of naming their plants, and in the spring of 1888 are to be furnished with one plant of each variety entered. The first of these prize winners is a yellow flower with quilled petals extending like rays; it is very distinct and

very odd. The novelties all run largely to oddity rather than beauty; connoisseurs have become weary of ordinary types, and lavish their admiration on flowers that impress outsiders chiefly as horticultural jokes. It requires a liberal education to appreciate them on first introduction.

The Pitcher prizes for the best single specimen and best specimen standard were taken by George McClure; the same grower took the May prize for the best collection. Mr. McClure also took prize for the best display of dwarf chrysanthemums, to be grown in 6-inch pots. This was one of the most interesting features of the show. The flowers were, almost without exception, particularly fine; the plants were well grown and tastefully grouped. One of the handsomest flowers in this group was Cullingfordi, a new Chinese. In form it recurves with great regularity until it almost forms a ball; the color is a deep, rich red, something near the fashionable shade of ox-blood, and the petals have a rich, velvety bloom that is simply indescribable.

Thorpe Junior still stands at the head of the list among yellow anemone-flowered varieties, while John Thorpe finds a worthy namesake in the deep crimson flower that bears his name.

For size as well as beauty, Mrs. Frank Thompson requires special note. It is a soft, silvery pink, with a slight tinge of mauve, and has the usual straggling Japanese form, slightly in-curved. It is

particularly large and striking. Another superb new variety at this show was G. F. Moseman; one needs a whole dictionary of adjectives to do it justice. It is an irregularly in-curved Japanese; the petals are buff without and bright terra cotta within. It is very large and robust.

Two charming new whites are Mrs. Langtry and Mrs. T. H. Spaulding. Both are picturesquely irregular in form; the first-named is especially noticeable for the width of its petals; the flower rather resembles a fluffy bunch of white ribbon.

The poorest feature of the show—we are treading on delicate ground now—was the display of designs. Most of them were criminally ugly; they really ought to have been suppressed, out of regard for the sacred name of art. The first prize original design really gave one a pain in the eye. It was a sort of Japanese cottage—at least we will call it a cottage—of autumn leaves and flowers. It stood in a thicket of plants fairly arranged. A papier mache Jap in a chrysanthemum toga peeped out of the door; he was not so very offensive, because he was partially concealed. In front another Japanese sat, or rather sprawled, in a rustic chair; he held a cigar in his hand, and judging from his appearance he had indulged, not wisely but too well, in the cup that cheers and also inebriates. His clothes were also built of chrysanthemums. This design was altogether indescribably affecting. But seriously, it was rather sad to see so much work, so



much patience, and so much actual ingenuity positively wasted; the maker was certainly capable of better things.

The largest number of prizes was carried off by George McClure, gardener to Mr. Spaulding, and Richard Brett, gardener to Mr. Pitcher. Mr. Spaulding has an exceedingly fine lot of seedlings, of which he is justly proud; a number of them show fine possibilities. Alexander MacPherson, Michael Doyle, F. Egau and others displayed meritorious exhibits and carried off their share of the prizes.

The roses and carnations were only moderately fine; chrysanthemums were undoubtedly the exhibition. Richard Brett displayed a lot of standards showing several varieties on one stalk; they attracted a good deal of attention.

Taken altogether, this show was of very great merit, and especially noteworthy from the excellent exhibit made by private growers. The trade was but slightly represented. The chrysanthemums did not have so good a backing as last year, but they were well arranged, and there was nothing skimpy about the show—the worst thing that can happen to a chrysanthemum exhibition.

EMILY LOUISE TAPLIN.

#### The Chicago Show.

This exhibition, which was given under the auspices of the Chicago Florist Club, was such as to reflect great credit on the club for its first attempt. Chicago has never had even a fair flower show until this, and the veteran florists could hardly believe their eyes when the decorations and the plant and cut flower exhibits were all fairly in place and the show was opened by Mayor Roche Tuesday morning. While but few really well-grown specimen chrysanthemums were shown, there was a large exhibit of excellent plants arranged in masses of color, and including all the newer varieties and some fine seedlings. John Goode & Co. carried off the majority of prizes for chrysanthemums, aggregating \$112, they receiving first prizes for six Chinese, three Chinese, three Japanese, one specimen Japanese, one standard Chinese, one standard Japanese, twenty-five kinds any or all classes, largest display of named kinds, and largest display of chrysanthemums (sweepstakes). John Lane, an enthusiastic amateur, received first for six Japanese, one specimen pompon or anemone, and best specimen of any variety; F. W. Brookes for three pompon or anemone; D. B. Fuller for best twelve of one variety, he showing twelve excellent plants of *Gloriosum*. A very large exhibit containing some handsome plants in beautiful bloom was shown by the Chicago Floral Co., the exhibit containing, in fact, more plants than did that of Goode & Co., but the plants did not average as well and the arrangement was considered to be inferior. Mr. Lane's exhibit contained some very fine plants, and some flowers cut from plants imported from Japan last May were remarkable for size and beauty. Nicholas Singler also showed some very good plants.

The display of decorative plants was considerably larger than expected, and added a rich feature that did much to make the show attractive. The exhibits of Messrs. Reissig, Anthony, Fuller and Wittbold were worthy of liberal notice, not so much from the few rarities they contained as from the tasteful and attractive manner in which they were arranged. Charles Reissig received first

premiums for pair specimen palms, largest collection of palms, best collection of orchids, best collection of decorative plants, best collection of palms, best specimen fern, best collection of adiantums, largest display of orchids in bloom and best arranged exhibit of plants—a total of \$230 in premiums. J. Goode & Co. received first for collection of dracaenas and a special prize of \$25 for best collection of begonias. D. B. Fuller received first for specimen palm and most artistically arranged group of decorative plants; J. T. Anthony for best collection of ferns, and George Wittbold for best filled vase of tropical plants.

The exhibits of cut roses were not as large as they should have been, there being but five exhibitors; still some very fine blooms were shown. Sidney Clark, foreman for McCormick farm, took the first prize for best collection, showing some excellent blooms; James D. Raynolds took first for the best dozens of Perles, *Souv. d'un Ami*, *La France*, *American Beauty*, and any new variety; Chas. Hild for twelve Mermets, and Geo. Klehm for dozen *Bon Silenes*.

Nicholas Singler received first for best collection pot carnations in bloom, and a diploma for best new carnation; he showed some very fine white seedlings.

The arrangement of the exhibits on the floor was entirely with a view to create the best effect as a whole rather than for convenience in examination, and the result was certainly more pleasing to the patrons of the show than to the judges when they came to perform their labors. The large building was elaborately decorated before any plants were admitted, an immense quantity of wreathing, palm leaves and other material being used for the purpose. The Second Regiment orchestra rendered a select programme every afternoon and evening, and a programme containing the order of music, the premium list, and we may add, the business card of nearly all the down-town florists, was handed each visitor at the door.

The floral designs were hardly up to what was to be expected from those who entered. On the first day M. F. Gallagher received the first on wedding design, his entry being a two-sided panel, one side of fronds of *Adiantum gracilimum*, with a basket of choice roses embossed upon its side surmounted with two handsome bunches of *Lapagerias alba* and rosea; the reverse side bore two hearts partially joined, one of crimson roses and the other of violets, skewered together with a chrysanthemum arrow. The side first described was really handsome, but the last was altogether too suggestive of the 10-cent "18-karat rolled gold engagement rings" of the agricultural paper advertisements, and gave a shiver to sensitive people. The second prize was awarded to Frank Whitnall & Co. of Milwaukee, the design being the only decidedly original one shown. It represented two tasteful wreaths of flowers and foliage at unequal heights joined together by pink and white floral chains. It is rather difficult to describe; an illustration may be given soon. Mr. Gallagher also took first on basket, the sweepstakes for the largest display of floral work, and the special prize for best arranged exhibit. His basket was very handsomely arranged, and fully deserved the prize it received. On the second day Mr. Gallagher again took first on best funeral design, showing a 4-foot standing cross with a handsome garland of *Niphetos* roses and lily of the valley extending from the arm down to the base, which was arranged in

solid white to represent a rock. The workmanship was excellent and it was chastely beautiful, but it was a disappointment to many that the first prize did not bring forth something more original than a plain, common, everyday cross. The second prize design arranged by F. F. Bentley was a large white anchor resting on a rock of white decorated with adiantums and secured by a chain of *Niphetos* roses. It was a beautiful thing, the arrangement placing it farther from the beaten track than any other design except one shown by Whitnall & Co., which received much admiration from visitors. It was a black velvet panel on an easel, and upon its surface were artistically and simply placed a few handsome roses. Beautiful ferns drooped gracefully from the sides, while at the top was a spray of bloom of *Yucca gloriosa* and three *cycas* leaves. It was simple and aesthetic. The competition for the prize for best table decoration on the third day was more brisk. The entries of Messrs. Reissig, Gallagher and Kreitling were all meritorious, and the voting of the judges was very close. Walter Kreitling took first, M. F. Gallagher second, and Chas. Reissig third. Mr. Kreitling's floral ornaments were all flat and very simple, consisting chiefly of roses laid upon the cloth. The other two entries were arranged with taller center pieces, and though both presented a richer appearance, the judges decided that the first was more in accordance with the best taste, condemning the use of any object on a table which would prevent a guest from seeing across the board. M. Malsh won the Vaughan cup for Thanksgiving day table design. A floral design shown by Fred Kanst, supt. of South Park, under the title of "Dolly's Cradle" was very unique, and attracted much attention. The patch work coverlet was worked out with a variety of flowers, and was remarkably accurate. A wax doll rested beneath it.

The attendance was better than was to be expected in the feverish state of public feeling and the excitement caused by the execution of the anarchists; many timid people staying in their homes nearly all the week for fear of trouble. In addition, a drizzling rain fell during the first two days. The club is to be congratulated that under all these unfavorable circumstances they still managed to make a good show and come out even on the venture. The daily press were very liberal with favorable and lengthy notices, and the benefit to the whole trade in this city has, beyond question, been very great. The show was continued through the 11th and 12th inst., and the reception deferred until the evening of the 12th. Messrs. J. M. Jordan of St. Louis, A. W. Sawyer of Sycamore, Ill., C. B. Whitnall of Milwaukee, H. A. White of Evanston, Ill., H. L. Phelps of Springfield, Ill., and Wm. Currie of Milwaukee, acted as judges during the show. Quite a number of florists from western cities were present.

#### At Baltimore.

The chrysanthemum show of the Maryland Hort. Society was held in the Baltimore Academy of Music on the 8th and 9th inst., and was probably the best chrysanthemum show ever held by the society. Every inch of space was occupied, and poor stock was conspicuous only by its scarcity, indeed the judges had a difficult task to perform, except as to the special premiums. A list of the awards and notes on the exhibits will be given in next issue.



### The Philadelphia Show.

The chrysanthemum show opened with great eclat on Tuesday evening, the 8th, and continued to the 11th inst. It was pronounced by every one who attended it to be the best show ever held in this country. Every one is satisfied with the award of the "Grand prize" to Craig & Bro. They were away ahead of anything else exhibited as a whole, being very strong in good colored varieties and uniformity in size.

Messrs. F. L. Harris, Wm. Robinson and David Allan, all of Boston, acted as judges on chrysanthemums; John N. May, J. M. Keeley and J. G. Gardner, on cut flowers, and Wm. S. Dilkes, John Burton and Bryant Ferguson, on floral designs.

Following is a list of the awards—first, second, third, fourth and special prizes being in the order named:

#### NURSERYMEN'S AND FLORISTS' LIST.

Six standards, 6 var., Craig & Bro. Six yellow, 6 var., W. K. Harris. Six white, 6 var., W. K. Harris. Twelve, one of a kind, W. W. Coles, J. W. Colfesh, Fred. Muller. Twelve Japanese, one of a kind, J. W. Colfesh. Twelve Chinese, W. K. Harris. Specimen plant, white, W. K. Harris. W. W. Coles. Specimen plant, yellow, W. W. Coles, 3d W. K. Harris. Specimen plant any other color, W. K. Harris, W. W. Coles. Specimen standard, Craig & Bro. Six single flowering, 6 sorts, 3d W. K. Harris. Seedling plant, W. C. Fyter, W. K. Harris. Three specimen plants, 3 distinct colors, W. K. Harris, W. W. Coles.

#### AMATEURS' LIST.

Collection 12 different var., J. Shaw (Ravenswood), Pat. Conlan (gr. to Perc. Roberts), Fr. Sykes (H. Ingersoll), J. Wooding (Mrs. Roberts). Collection 6 varieties, Jos. Shaw, Wm. Dewar (Mrs. C. H. Wheeler), Pat. Conlan (Perc. Roberts); special, Th. Foulds (Singerly's), F. Sykes (Mr. H. Ingersoll). Collection 4 different var., Alex. Kerr, Jos. Shaw, Thos. Foulds (Singerly's). Collection 6 standards, different var., Pat. Conlan (P. Roberts), Wm. Dewar (Mrs. Wheeler). Specimen plant, white, J. Wooding (Mrs. Roberts), Pat. Conlan (P. Roberts, Jr.). Specimen plant, yellow, Wm. Dewar (Mrs. Wheeler), Th. Foulds (Singerly's), J. Wooding (Mrs. Roberts). Specimen plant any other color, Pat. Conlan, Thos. Foulds, Fred. Sykes, Ch. W. Trotter. Specimen standard, W. Dewar.

#### SPECIAL PRIZES.

The Wootton prize—4 Chinese, 4 var.—John Shaw, silver cup. The Pembroke prize—4 Japanese, 4 var.—W. Dewar, silver cup. The Red Leaf prize—3 yellow, 3 var.—W. W. Coles, \$15. The Sunnyside prize—best seedling never before exhibited—W. K. Harris, silver cup; Ch. W. Trotter, silver medal; H. Surman (E. W. Clark) silver medal; J. W. Colfesh, bronze medal. The Record prize—6 plants grown without disbudding—Thos. Foulds (Mr. Singerly, Sr.), \$25. Collection seedlings not less than 3 plants, 1st H. Surman, 2d Robert Carey; special, Robt. Carey, bronze medal.

#### GRAND PRIZE.

Collection 25 plants, 25 varieties.

1st Craig & Bro., \$200; 2d Wm. Dewar, \$150; 3d John Shaw, \$100; 4th John Kinnear, \$50; specials—W. K. Harris, \$40; Fred. Muller, \$25; Karl Muller, \$20.

#### DESIGNS AND CUT FLOWERS.

Thanksgiving design, Pennock Bros., G. E. Rhedemeyer. Plateau of chrysanthemums, Pennock Bros., Craig & Bro., J. W. Mertiz. Window box, Augustus Lutz, Benj. Wood.

#### CUT FLOWERS.

Evans & Battles first premiums for best dozens of Perle des Jardins, The Bride, Beunett, La France, Bon Silene and Puritan; W. W. Coles for Niphotos and Comtesse Frigneuse; Heron & Nisbet for Papa Gontier and Mad. Cusin; Pennock Bros. for American Beauty and Mermel. First premiums for cut chrysanthemums were taken by John Cullen, W. K. Harris, E. P. Wilbur and John M. Hughes. The seedlings "Preferred," "John Sherman" and "Geo. W. Childs"—the latter an improved Duchess—were considered worthy of special premiums.

Descriptive notes will appear in our next issue.

#### At Indianapolis.

The chrysanthemum show at Indianapolis, Ind., Nov. 8-11, was a great success. The exhibits were both large and numerous, and some excellent plants were shown. Many florists from other cities were present. A full description, with list of awards, will be given in the next number.

COLUMBUS, O.—The Columbus Hort. society held a chrysanthemum show Nov. 12.

NEW HAVEN, CONN.—The Chrysanthemum Club gave an exhibition of plants and flowers Nov. 9, 10 and 11.

SAN FRANCISCO.—A chrysanthemum show was held under the auspices of the Woman's Exchange Nov. 8 at the Union Club building.

ST. JOSEPH, MO.—An excellent chrysanthemum show was given Nov. 2-4 by Florist Hans Nielson under the auspices of local society ladies, for the benefit of the public library. The local press considered it the finest affair of the kind ever seen in this city.

### Dendrobium Thyrsiflorum.

BY DAVID ALLAN.

Dendrobium thyrsiflorum, a synonym of *D. densiflorum albo luteum* is one of the most floriferous and beautiful dendrobies in cultivation. The sepals and petals are sometimes of a pink tinge, but more commonly white; the lip orange red. Nine years ago I got a plant with two bulbs and one growth, kept it growing for the first two years near the top of ventilators in a plant stove, just where the inside current would meet the outside air in the summer time. The first year it made a growth in the spring and two in the fall, starting again next year with three in the spring and three in the fall; the following spring it had six leads. Ever since then I put it among the other flowering dendrobiums, giving it a good long rest in the winter months. It made one crop of bulbs annually, and flowered every season. The engraving is of the same.

My experience is not to give small plants of the evergreen varieties so long a rest as the large ones, or until the leading growths have become full-sized. Flowering small plants tends to weaken what would otherwise be strong. A good plan with this, and the same holds good with all other orchids as long as they are small, disbud as soon as the bud or spike appears, unless it is a flower or to gratify a curiosity as to its variety. Another good plan to help weak plants is to cut off the spikes or blooms as soon as they are opened; the flowers will last a long time in water, and the poor plants will be benefited thereby.

Mt. Auburn, Mass.

[The illustration was engraved from a photograph sent us by Mr. Allan, and is an exact reproduction of the same.—ED.]





Wintering Standards.

The many failures to successfully winter standard roses out of doors in this climate suggests a note on the method employed at Lincoln Park, Chicago, where a bed some twenty-five feet in diameter has been wintered without the loss of a single plant.

Early in November the plants are pegged down to the surface, and where a stem is too stiff to bend safely the plant is slightly loosened with the spade on the side opposite from that to which the plant is bent. They are allowed to remain exposed until the wood is well ripened and there is danger from a hard frost. A light covering of leaves is then placed on them, and the covering is increased in depth by additions as the season advances until they are protected by a depth of one foot or more. A scantling is then placed across the center of the bed on posts about two feet high and boards laid on so as to form a roof with a pitch of a foot each side; this is to carry off the rain and melted snow. In the spring the covering is removed as gradually as it is put on in the fall. A portion of the leaves is removed before the roof, to allow the air to circulate but still protect the still dormant plants from the sun which frequently comes out strong on bright spring days only to be followed by a sharp frost. The boards are removed as the weather becomes more settled.

#### New Roses.

Some weeks ago I promised to give a few particulars concerning the seedling roses raised by Mr. John Cook of this city, and having in the meantime visited Mr. Cook's establishment, I am in a position to fulfill my promise, but I regret that lack of time will not permit me to go into detail as fully as I would like. I must refer to Mr. Cook's productions by number, his seedlings being yet unnamed with the exception of Dr. Engleman, which is already in the market; it is a rose resembling Papa Gontier, but Baltimore florists who have tried both varieties unhesitatingly pronounce in favor of Dr. Engleman; the bud is rather small, but the color is exquisite, the fully developed flowers possess great lasting qualities, and are most desirable for cut flower work. Of the other seedlings, No. 1 is a seedling from Caserta and Gloire de Cheshunt, it appears to be a very vigorous grower of compact habit; in color it is a deep pink and the flowers are of considerable size, several which I gathered at random measured three and four inches in diameter. No. 2, a seedling from Gen'l Jacqueminot and Mad. Camille, is one of the most brilliant crimson roses I have ever seen; the buds are of fine form, large and double; this variety stands forcing well and is most undoubtedly an acquisition. No. 3, a seedling from Bon Silene and Louis Van Houtte, resembles the latter in color, but is more double and of better form; I was particularly attracted by the magnificent foliage of this seedling, which might be briefly described as an ever-blooming L. Van

Houtte. No. 4, the last on the list, was to my mind the gem of Mr. Cook's collection, it is a seedling from Bon Silene, a strong grower, and evidently a most profuse bloomer; Mr. Cook has about half a house planted with this seedling, and when I saw them the plants were literally covered with bloom, it is a white rose, but in strong sun comes with a slight flesh-colored tinge in the center. Mr. Cook assured me that it blooms incessantly from January to December; growing in the same house with this seedling were a lot of Puritans, and any comparisons would certainly be unfavorable to the latter. Mr. Cook will place two or three of his seedlings on the market next spring. Those to which I have referred being selected from hundreds of others, as embodying the most desirable qualities for commercial purposes.

Mr. Cook is recognized as the best rose grower in this part of the country, and a walk through his rose houses fully demonstrates his right to such distinction. A house of Perles and Sunsets was a sight that I will not soon forget. Mr. Cook believes that Sunset does best grown in a somewhat shaded position; roses grown in this way were as large as tea cups and magnificently colored. Did time and space permit I would like to refer to some of the novelties which Mr. Cook has gathered from all corners of the earth, but I must content myself for the present by mentioning two which I specially noted, an Iris from southern Europe, said to bloom from November to February, and a single blue violet with flowers as large as an ordinary pansy.

Baltimore, Md.

A. W. M.

#### American Beauty.

In reply to the query as to the value of this rose for out-of-door culture, I would say that with me it has proved hardy, plants standing out last winter with the mercury 20° below zero for days at a time and they have bloomed all this summer, but no one seemed to care about the blooms. The flowers were large and many of them fine buds, especially as the weather became cooler, but they did not sell; the color seemed to be against them, as they were a dirty pink in hue. Souv. d'un Ami and Mermets were taken in preference to the Beauty every time, yet I shall continue to grow them, as the rose has proved to be with us a good bloomer, an ironclad in constitution, and a good seller as a garden rose. When planted out of doors, they do not grow as tall as in the house, but make nice bushy plants. Under glass they have proved worthless with us. Long canes will grow up to the glass but produce no bloom. We have no trouble in blooming other roses profusely.

R. S. BROWN.

Kansas City, Mo.

#### Grubs.

The Kemble F. & S. Co. (p. 131) ask for information as to the cause of trouble with their roses, the bark being eaten off around the stem near the surface, which causes them to die. If these gentlemen will, as soon as a plant or plants show signs of wilting, stir up the soil around the plant at once, they will undoubtedly find a large white grub with a brown head which is the larva of the common May bug, June bug, or tree bug, as often called. It is very closely allied to the green rose beetle (*Cetonia aurata*), and is equally destructive. The only remedy known to me is careful watching and de-

stroying them as soon as detected. In several communications to the FLORIST I have cautioned rose growers about places to select soil from so as to avoid collecting these as far as possible. Soil from the near vicinity of trees is almost certain to have more or less of these pests in it. Of late years I have always carefully examined the soil we are collecting for growing plants, and if any of these are found I show it to all the men engaged in the work, and give them particular instructions to destroy every one they see during every time they are working at the soil. By these means we generally keep fairly clear of them, but in certain localities they are much worse some seasons than others. Entomologists say this insect takes three years to develop, which would account for their being more numerous some seasons than others. Roses are not the only plants which suffer from them; geraniums, stocks, asters, mignonette and a host of such like plants are all suitable food for them, and oftentimes I have seen and had plantations of such plants seriously damaged by them.

J. N. MAY.

#### American Beauty and Her Majesty.

In the last number of the FLORIST "Reg" asks about the perpetual flowering qualities of the Beauty outside. In our climate I don't think it will ever be suitable as a bedding rose. Early in the spring it did first-rate; gave perfect flowers and continued to bloom till the hot weather set in, then stopped flowering and growing. Possibly it may do better in a climate where the thermometer does not run up to 100° for three months' time.

About the discarded "Majesty" as a bedding rose, in my place I must say it did splendid this year, the second after planting. The first year I did not see one flower on it. This year—a very unfavorable one for roses, on account of the dry weather—I am very well pleased with it. Not only did the plants give a great profusion of good, perfect flowers, but bloomed occasionally during our dry, hot season, most of them outside. For a few weeks, since we have had a lower temperature, the flowers are coming perfect.

A. C. OELSHING.

Savannah, Ga.

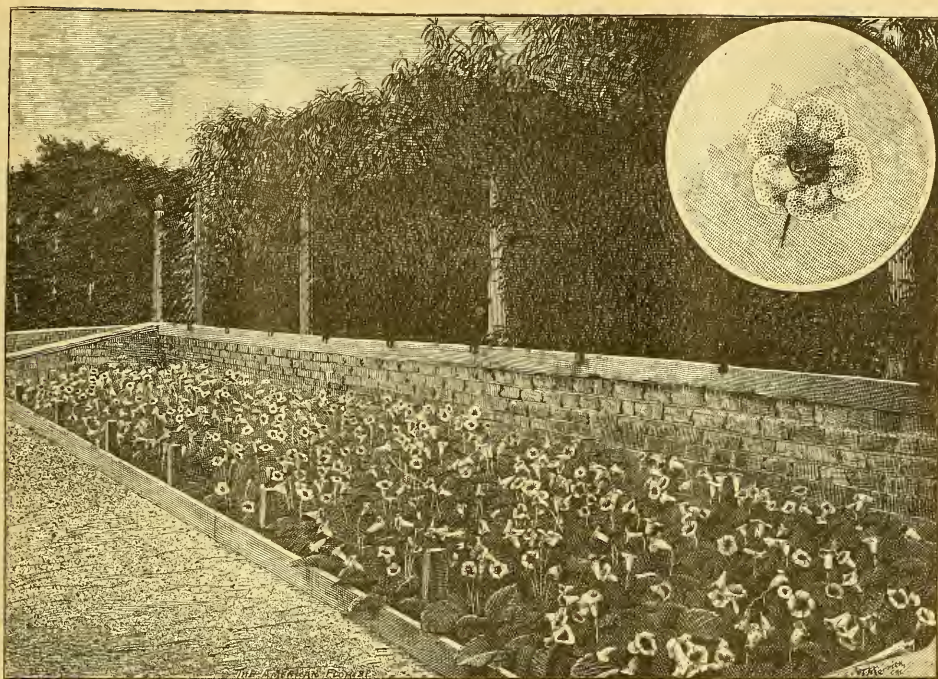
PRUNING ROSES.—In the article under this head on page 130 in last issue, a typographical error in the last line in first column made Mr. May say "for some time after 'January'" instead of "for some time after pruning." Readers will please note this correction.

#### Gloxinias in Frames.

BY WM. FALCONER.

We grow gloxinias in quantity for cut flowers between March and October. On account of limited greenhouse room I do not grow them in winter, but my friend David Allan, of Boston, makes a specialty of them for winter flowers and with much success. As I pretty fully described our method of cultivation in the FLORIST Feb. 1 last, I need not now repeat what I then wrote. Gloxinias grow and flower beautifully in pots, but if you would have them in their most vigorous and perfect condition, plant them out in a cold frame in summer in like manner as you would a polyanthus or a forget-me-not in winter.

The accompanying illustration is reproduced from a photograph of a gloxinia frame taken here Aug. 4, last. This



GLOXINIAS IN FRAMES

frame is sixty-two feet long by six and one-half feet wide, and during the summer months was entirely filled with gloxinias planted out as we would lettuces or pansies; indeed, they succeeded a crop of spring lettuces and in the same soil. In order to get a good photograph you observe that I knocked off the upper front board, also removed the cross-bars. The frame faces the north. Against the south side of it is a trellis covered with peach trees. These trees do not shade the frame in summer, but as shading, in the case of gloxinias is peremptory, I shade the sashes thickly with a paint made of naphtha and white lead, or sometimes with turpentine and white lead. This paint can easily be washed off at any time.

All the gloxinias in this frame were raised from seed sown in a warm greenhouse last spring—one batch in February and another in March. In due time the seedlings were pricked off into other pans, thence, but further apart than they were in the pans, into "cutting" boxes, from which, June 1, they were planted into the frame. By this time they were pretty large plants. By the 1st of July several of them were in bloom; by the 1st of August all were in bloom; by the 1st of September they were past their best, and by the end of the month most all of them had done blooming and were showing a disposition to go to rest. On the 27th of September I cut them over close to the ground and lifted the bulbs, and on the 28th replanted the frame with lettuces for winter use. In cultivation in pots we generally gradually dry off the bulbs before cutting them over and stor-

ing them; but in case of frames although we do not give any water for some weeks before lifting time the soil does not get quite dry hence the bulbs are not dried off. But I never have found this sudden cutting over to hurt the bulbs providing they are not kept perfectly dry immediately afterwards. Our one-year-old bulbs from frames are fully twice as large as two-year-olds from pots.

During the summer months ventilate the frames in favorable weather by tilting them up at one side—in the forenoon on the west side, in the afternoon on the east side. Never let the ground get dry, but don't water frequently, rather water copiously and seldom, and don't spill the water on the foliage. Strip the sashes on a dull day once or twice a fortnight to give you a chance to pick off decaying flowers or leaves, clean out weeds, stir the soil with an Excelsior hoe, and water if necessary. Never let direct sunshine strike the plants.

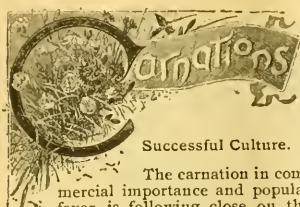
After lifting the gloxinia bulbs I lay them one deep and closely packed up against each other on shelves which are arranged one above the other, at the end of, but inside, a greenhouse where the minimum winter temperature is 55°. And I spread a thin layer of sand under the bulbs and over them so as to fill up as high as their top. Don't keep the bulbs kiln-dry, but now and again sprinkle a little water over the sand.

The bulbs that I grew in frames this year shall next year be used for pots between March and June, and a fresh batch of seedlings again raised for next summer's frames.

Last spring I raised a multitude more of seedlings than I knew what to do with or had room to grow, so I planted them into flats as I would rooted cuttings of geraniums or verbenas, two by three inches apart, and set these boxes out under the shade of a grove of trees, and left them there all summer, giving them water occasionally. They all made nice little plants and elbowed each other considerably for room, but only a few of them blossomed. In October I cut over the plants in these boxes, turned out the earth and gathered the bulbs. These are about the size of kidney beans or small marbles, but excellent stock for next year's blooming in pots, May to July, or for planting out in frames.

Where pot plants are used for table or room decoration, gloxinias come in very handy. When they start to grow nicely and before the leaves reach out past the brim of the pots, by means of a wire band and string suspend the plants to the roof and within eighteen to thirty inches of the glass, as you would an orchid pot or basket. In this way the leaves will grow out and lap right down over and close to the sides of the pots, which they completely hide from view, indeed, they usually reach down further than the pots and in this case if stood down the pots had better be supported on inverted empty pots or other pedestals. I suspend them to the ridge pole in a span-roofed propagating house; here they are near the glass and out of the way, easily reached with a small flattish watering-pot, and the drip from them fall directly onto the floor.





### Successful Culture.

The carnation in commercial importance and popular favor is following close on the heels of the rose, but in your columns there are a score of articles on the rose to one on the carnation.

The successful culture of the rose is reduced in many particulars to almost mathematical certainty, but the best methods with carnations, is not a matter of agreement among carnation growers. We have 30,000 carnation plants housed for winter blooming, will some one tell us (not by a guess) by practical and comparative experiment what temperature to maintain in the houses to obtain the greatest quantity of bloom? Will some one tell us by actual and comparative experiments with the kinds, those best adapted to pots for spring retail trade.

Carnation growers would like to know the comparative earliness of kinds, and which kinds, or kind, by actual count produces the greatest number of flowers on the bench. With us these are important questions, and for our own interests, we have been laboring for years to determine these and other questions, by the test of demonstration. Our theory of the treatment of carnation cuttings was largely suggested by the remarks of John Henderson at the convention of the Society of American Florists, held at Cincinnati in 1885.

Carnations are biennials, which means in order to perfect seed to perpetuate themselves (which is the object and end of a plant's existence) the activity of life forces must be interrupted by a period of dormant life, (viz.: two summers and one winter). If a cutting is taken in January and kept growing until it is planted in the field the 1st of May, then lifted the last of September and kept growing and blooming under glass until the following July, there is no dormant period in its life. A dormant period is in accord with the nature of this plant; the question is, would the flowering qualities and habits of this plant be benefited by a dormant period in its life, if one could be given it? Demonstration answers yes! Cuttings started in October, November or December, finely grown 'till February 1, well hardened off, and kept in a cold frame dormant till planted in the field will make plants that have a far better habit on the benches, and produce more flowers and have better health than if treated the usual way. The "usual way" of treating cuttings compels the plant to put on perennial habits, as does the climate of southern California, viz.: straggling habits and an excess of cane and foliage growth at the expense of flowers, and dwarf and compact habit.

The comparative earliness of blooming is largely controlled by the treatment of the kinds in the field. Walter Coles says that "Hinz's White should not be headed back in the field after August 15, or it will be too late to be profitable." Our experience proves that if the Hinz is not headed back at all in the field it will begin to bloom under glass in October and continue to do so 'till the following July. Snowdon can be headed back in the field until September 1, and will then par with Hinz in earliness.

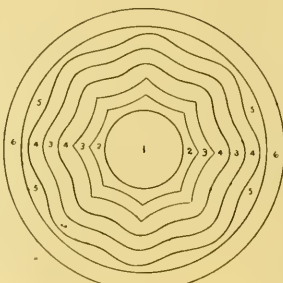
The class of white carnations worth cultivating is very limited, their time of blooming can all be regulated by the treatment of the cutting and the plant in the field, except Quaker City, which is determinedly late. Carnation plants would be one of the most popular plants grown for spring sales, if they could be offered, and give the satisfaction they should to purchasers. Will some of our carnation growing Solons give us an essay on this point?

L. L. LAMBORN.

Alliance, O.

### Fancy Bedding.

On this page appears a diagram of a handsome bed which adorned Drexel boulevard, Chicago, the past summer. The combination of colors was very pleasing, and the wavy lines displayed them to excellent advantage. The bed was eighteen feet in diameter and contained about 3,000 plants.



### KEY TO DIAGRAM.

1. *Achyranthes metallica*. 2. *A. Herb-stii*. 3. *Alternanthera aurea*. 4. *A. paronychioides* major. 5. *Sweet alyssum*. 6. *Alternanthera amena*.

ASHES AND MANURE.—For the past five years I have manured my carnations in open ground with wood ashes and old plaster. When they are planted in the benches they are again manured with ashes and when they commence to bud are given twice a week liquid chicken manure. They make a fine stocky growth and the flower stems are still of sufficient length. I have never had any disease among them; am still growing the old DeGraw to perfection. I am careful not to get the unleached ashes too thick as they might thus burn the plants.

Davenport, Ia.

J. T. TEMPLE.

### The Propagating House.

For the general run of bedding plants the sand in the propagating bench should be somewhat coarser than that in use in many places. Where very fine sand is used, it packs so closely that the water does not percolate through it as rapidly as it should, and the danger from damping due to stagnant moisture is much greater. Very fine sand should be used for but one batch of cuttings, while the coarser sand may be used a whole season by turning it over and drying it out before using it for another batch.

The treatment of cuttings taken from out-of-door stock in the fall—much of which is inclined to be soft—should be such as to further ripen the cuttings after they are placed in the bench. This is best done in the case of such plants as geraniums, by watering the cuttings after

being placed in the bench only enough to settle the sand firmly around them, and then merely spraying lightly as they seem to need freshening; but never thoroughly wetting the sand for a period of about ten days, or until the cuttings are calloused. The bench should never be shaded unless the sun is unusually strong, and air should be admitted to the house, on every possible occasion, especially during muggy weather. The propagating house should be as light as any you have and the bench as near the glass as possible. If you want stout, healthy plants, don't strike your cuttings in a close, dark tunnel.

C. S.

### Odds and Ends.

Herman Bros. have a new mignonette of which they are very proud, and it would really seem to be a good thing. It is a seedling from pyramidalis and spiralis. The flower is rather dark in color, but the trusses are of immense size and extremely fragrant. It goes on the market next spring.

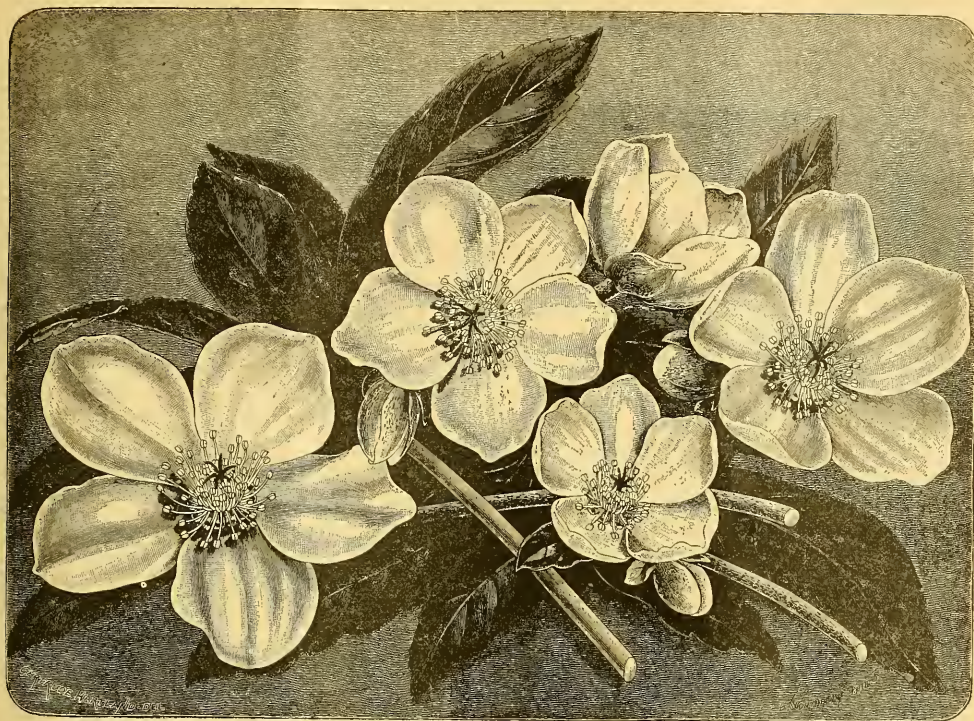
At a recent meeting of the Baltimore Florist Club an animated discussion was indulged in as to the value of The Bride for forcing purposes. Some of those present did not think it could be relied upon as a *white* rose; in their experience they had noted a decided tendency on the part of The Bride to show its origin. Mr. James Pentland believed he had seldom, if ever, seen a flower of this rose without more or less of a pink tinge, and he considered Niphetos the best white rose for forcing. President Halliday, however, as a result of what he had seen with others and his own experience, was convinced that The Bride is the best white rose for forcing ever introduced—a good grower and a free bloomer.

"The powers that be" have issued an order, unalterable as the laws of the Medes and Persians, prohibiting the superintendent of Patterson Park from exhibiting plants from the park conservatories. No satisfactory reasons have been given for such action, but the order deprives the Maryland Hort. society of a very interesting feature at its exhibitions.

Wisecracks were not wanting last season who predicted that the chrysanthemum craze had about run the length of its tether. There is no sign of their predictions being verified, so far at least as Baltimore is concerned; every florist hereabouts has the craze this season, and chrysanthemums are abundant. Herman Bros. have a particularly fine lot, and indeed every collection I have seen so far bore evidence of having received unusual care and attention. As a result, the honors at the approaching exhibition will be keenly contested. Several special premiums have been offered by private parties, and a very full and interesting exhibition is anticipated.

I wonder when we shall reach that era in the history of the florist trade when some of us will be animated less by sentiments of personal aggrandizement and more by a desire for the greatest good to the greatest number." We do not assume any right to criticize a man's method of doing business so long as nothing questionable is apparent, but I am sorry to say that we have men in the trade whose business principle is very doubtful. Certainly nothing can be more reprehensible than the practice common with some wholesale houses of selling to private parties at prices as low and not infrequently lower than the prices charged to retail growers. I know a wholesale dealer whose "confidential" wholesale price is regularly distributed amongst private par-





CHRISTMAS ROSES (HELLEBORES).

ties, and their orders for plants, seeds, etc., filled at trade prices. The lady or gentleman who can buy at wholesale rates will not pay regular prices to the retail grower, whose business suffers accordingly. The wholesale dealer who by such unprincipled practice virtually takes the bread and butter out of the retail dealer's mouth, deserves at least to be generally ostracised by the trade. There are few retailers in the country who have not felt the effect of this pernicious practice, and it seems to me that the existence of the grievance and the need of a permanent remedy are good and sufficient reasons why the retail dealers of America should, to a man, join the S. A. F.

As a fertilizer, especially for rose houses, I like nothing better than cow manure, applied either as a top dressing or in liquid form. I prefer the top dressing, however, and if not already done, it should be put on at once. It will require renewing from time to time, removing as much as possible of the old and dried dressing before putting on the new. When they can be procured, refuse hops will also be found an excellent top dressing for rose beds during winter.

Baltimore, M. D.

A. W. M.

**MIGNONETTE DISEASE.**—Can any readers of the *FLORIST* tell me the cause of, and a cure for "freckles" on the foliage of mignonette?

A. ROSBACH.

Pemberton, N. J.

#### Christmas Roses.

Christmas roses are largely grown, and considerably utilized for furnishing cut bloom in England and on the continent, while here they are rarely seen. A sufficient reason is found in the fact that the treatment found most suitable in the countries named will not answer in this climate. Still with the constant demand in our large cities for something new in the way of cut flowers, some enterprising grower may find it worth while to endeavor to meet the requirements of this plant under American climatic conditions and if the expense of the same is not too great they could be made profitable. The illustration is an engraving of a variety named Riverston Hybrid which we have reproduced from the *Gardeners' Chronicle*. An article by T. D. Hatfield containing some suggestions as to methods of handling Christmas roses in this climate may be found in our issue of March 15, 1886.

#### The Melon Pear.

I purchased the melon pear in the spring of 1886; planted out with the tomatoes, the plants being about a foot high and commencing to bloom. They grew vigorously and blossomed continuously. The last of July I was satisfied they would not set fruit of themselves, and I fertilized a few flowers artificially, at the same time taking a few cuttings for trial in the greenhouse. The result

of fertilization was three or four specimens of fruit, which were gathered about Oct. 1, nearly full grown, but unripe. The latter part of the summer the potato bugs collected on the plants and nearly destroyed them. The fruit kept in the cellar till February, when they became eatable. The plants struck from cuttings were kept in the greenhouse and planted in the carnation bed. They bloomed and set fruit the latter part of September and on for a month or more, when the flowers became sterile. Growth was rapid during winter, the plants growing eight or ten feet high. I tried constantly to impregnate the flowers, but with no success till March. The first fruits were imperfect, having a flower inside, which was to me a great curiosity. In April fruit set perfectly without assistance, and the form was perfect. Some clusters had five or six fruits. In May the flowers again became sterile, and so continued all summer. By July they began to ripen, about four months from blooming.

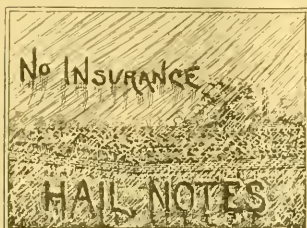
The fruit is egg shaped, hanging by the large end, pale yellow with purple streaks, skin thin, flesh solid, more juicy than a pear, without seeds, having the taste of a muskmelon, with an acid flavor. The best specimens were not as good to my taste as a muskmelon. The plant has the habit of branching at every leaf, and soon becomes so thick and branches so slender that few flowers appear, and none strong enough to set fruit. This difficulty I overcame by frequently picking



out the superfluous shoots, leaving only a few leading stems. It required tying to a support. I think it will in the greenhouse, with proper care, set two crops of fruit a year. The quality of the fruit is not good enough to win a place for it in the market. I consider I have given it a fair trial, and think it of no value here.

SEWALL FISHER.

Framingham, Mass.



Hail Insurance.

Hail notes at this season of the year may be unseasonable, but Miss Emily Louise Taplin, in the *FLORIST* of Sept. 15, gives voice to an expression which throws light upon the manner in which very many people regard insurance of all kinds, that of hail included. Miss Taplin writes: "Those in the more favored localities are averse to joining because they have a feeling that they may be assessed for the losses of others without ever requiring a similar benefit themselves." The writer is aware that this is the common view of the matter, but would those persons who view hail insurance in this light be willing to have their glass broken to secure a "benefit?" Most people are willing to pay their insurance, and let others get the "benefit" of a hail storm. The proper light in which to view insurance is that you receive a daily benefit from the fact that you are protected against loss if it comes. The only question that remains of Miss Taplin's statement is: Do florists in the east pay more than a proportionate share of assessments? The Florists' Hail Association having been in practical operation only five months, it is impossible to speak from statistics, but a glance at this subject may serve to enlighten some who have not given the matter careful attention.

The number of square miles west of the Alleghenies and north of the Ohio river is about 700,000. The number of square miles east of the Alleghenies and north of Mason and Dixon's line is about 165,000. It requires then about four hail storms in the west to keep even with the east. Again, take a hail storm ten miles long and one mile wide, and there is ten times the chance of breaking glass in the east than there is in the west, from the fact that greenhouses are more thickly located east than west. Let a hail storm such as I have supposed sweep over any section within thirty miles of New York, and what would be the result? Taking these things into consideration, the "favored localities" are hardly paying more than their share of the assessments. Again, theorists said, nine-tenths of the hail insurance will be taken in the west, while practical hail insurance shows that nearly one-half of the glass insured is located in the east, with a strong probability that the largest half will be taken in the east in a short time. It is now a noted fact that those localities that shouted loudest and longest for hail

insurance are still getting ready to come in, and that many of the large establishments, contrary to expectation, have availed themselves of its benefits.

In conclusion, it would be well to say that when 3,000,000 square feet of glass is placed upon the books of the association, the officers will feel that the "Florists' Hail Association of America" is founded upon a solid rock, no matter what weather may come along. The duty of those who believe in hail insurance and desire protection is plain.

JOHN G. ESLER.

#### To the Members of the S. A. F.

Some explanation is due the members of the society regarding the mutilated appearance of the envelopes in which the reports of Chicago meeting were mailed. In order that nothing should be done contrary to the ruling of the post-office department regarding printing on envelopes, I went personally to the proper authorities, and was informed that the stamp of the society with names of the officers would be permitted on the envelopes as in previous years. In accordance with this permission, the envelopes were so printed. Two days after the reports had been mailed I was notified from the postoffice that the ruling had again been changed, and that the whole lot of reports was still lying in the office unmailed. They insisted that the printing on the envelopes must be obliterated or first-class rates would have to be paid. It is needless to say anything here in condemnation of such contemptible humbugging. Every one can see and judge for himself whether the department is trying to accommodate and serve business people, or is doing what it can to annoy and discommode them. It will be well for those in our trade who contemplate mailing circulars or catalogues to go slow and avoid a similar experience, if possible. In this connection I might also say that several letters which I have mailed containing cheques, etc., have failed to reach their destination, and it is possible that some mailed to me have not been received. All members of the society who have sent their annual dues by mail should have received in return a receipt for the same, and also by this time the annual report. Those who are entitled to it, but have failed to receive it, are requested to notify me at once.

WM. J. STEWART, Sec'y S. A. F.

**MAMMOTH VERBENAS.**—In the advertisement of Messrs. Peter Henderson & Co. in last issue (p. 142) a typographical error made the price for these \$12 per thousand, whereas it should have been \$25 per thousand. The care with which all proofs of matter for the *FLORIST* are read and revised renders such errors extremely rare, but they will occasionally creep in. This liability is greatest where an advertisement is received very late and the time is insufficient to permit of a second revise as is done with all matter received earlier.

THE RECENT ACTION of the postal authorities in so strictly interpreting the laws regarding third-class matter is provoking much criticism, mainly because of no notice given of the coming change. The department has somewhat modified the first rulings.

THE MISSOURI STATE HORT. SOCIETY will meet at Boonville December 6-8 next. Premiums will be given for displays of fruits.

#### Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1886.

Nov. 16.—Tem., morning 40°, noon 46°, evening 44°. Wind SE. to S. Placed in propagating bench cuttings of *Alternanthera aurea*. Potted in thumb pots rooted *echeveria* offsets.

17.—Tem. 45, 54, 36. S. Same as yesterday.

18.—Tem. 24, 24, 27. WSW. Same as yesterday and covered rhododendron beds with leaves.

19.—Tem. 20, 36, 41. W. to S. Put in cuttings of *Alternanthera amena*. Put top shutters on rhododendron box. Covered roses, clematis and hollyhocks with leaves.

20.—Tem. 31, 44, 41. W. Same as yesterday.

21.—Tem. 28, 44, 40. WSW. to E. Sunday.

22.—Tem. 42, 47, 49. SE. Put in cuttings of *Alternanthera amena*. Pricked out in boxes rooted *echeveria* offsets. Potted rooted petunia cuttings.

23.—Tem. 45, 35, 26. WNW. Finished propagating *Alternanthera amena*. Put in cuttings of *matricaria* and *Panicum variegatum*. Pricked in boxes rooted *echeveria* offsets. Laid down clematis around office building. Cleaned and stored caladium bulbs.

24.—Tem. 19, 21, 24. NW. Put in cuttings of *Begonia semperflorens rosea* and *Ficus elastica*. Potted rooted *Echeveria rosacea* and pricked out smaller ones in boxes. Covered standard roses with leaves and boards.

25.—Tem. 19, 25, 24. NW. Thanksgiving day.

26.—Tem. 15, 27, 22. W. Commenced repotting primulas into 4-inch pots. Commenced covering tulip beds.

27.—Tem. 22, 35, 38. SW. Finished covering tulip beds. Continued repotting primulas.

28.—Tem. 22, 33, 37. S. Sunday.

29.—Tem. 22, 30, 30. NW. to NE. Commenced repotting coleus into 3-inch pots. Carted potting soil into houses. Cleaned large plants.

30.—Tem. 27, 33, 28. NE. Continued repotting coleus. Laid glorioxia bulbs away in dry leaf mould and caladium bulbs in dry moss.

#### Greenhouse Wheelbarrow.

A description of our greenhouse wheelbarrow may not be out of place, as it is easily made and one of the handiest things we have to work with. The handles of an old wheelbarrow, the box of which was played out, were drawn together so as to go through a 2-foot walk easily, and fastened securely as before. Then a floor was nailed upon the handles, to which a box is lightly tacked for wheeling dirt. This can be taken off when the barrow is needed for carrying boxes or other large things.

Union, N. Y.

HAKES & SON.

**POTTING SOIL.**—Have you a good supply of potting soil under cover, where it can be easily got at? If not yet attended to do it now, before the weather prevents. Also be sure to have sufficient. Don't neglect this matter and then be obliged to work half a day with a pick before you can get soil. Economize in labor by doing things at the time when they can be done to the best advantage. It is just as important to have a good supply of potting soil under cover as it is to have a supply of fuel in your boiler house. G.

## The "Moon Flower."

Are Ipomoea noctiphylon and I. bona nox one and the same thing as a great many would have us believe? I think not, at least if they are, I have this summer grown I. bona nox and another species which is much superior. I. bona nox has leaves very much resembling the common morning glory, makes a rapid, strong growth, and if in rich soil the joints are far apart and few if any flowers appear before it has attained a large size, and even then not very abundant, nor are the flowers so large in size as the I. noctiphylon. The leaves of this latter species with me are of large size, sagittate, of a bright green color, the growth strong and the stems covered with small roots; it is also shorter jointed than the other and produces its large pure white flowers in abundance from the axil of every leaf. I do not intend cultivating any more of the bona nox, but shall propagate from cuttings the noctiphylon, it being so much superior.

M. MILTON.

**COXCOMBS.**—If you want the best seed, grow it yourself and save it from only the handsomest "combs" on dwarf plants. They make the best display when bedded if quite dwarf and surmounted with a large, rich crimson "comb."

**LA FRANCE.**—This beautiful and fragrant rose is continually advancing in popular favor, and more and more space is being devoted to it by the cut flower grower; still some years ago many growers discarded it as worthless. It evidently requires time and continued trial to establish upon a solid foundation the merits of any rose.

**BEGONIA FUCHSIOIDES.**—This begonia is quite valuable for furnishing graceful sprays of flowers for basket work in winter to those who both grow flowers and make up work. It is of no value for shipping, but where flowers are used on the place the flower sprays add a grace to floral work that is surpassed by no other flower, and in addition it is almost a perpetual bloomer.

## SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order.

**SITUATION WANTED.**—As gardener and florist, a German, age 40; private or commercial place (private preferred). Address Wm. Fritzsche, New Bedford, Mass.

**SITUATION WANTED.**—By a first class rose grower in the west; can furnish best of references; has had 13 years' experience. Address Z. care American Florist, Chicago.

**SITUATION WANTED.**—By a gardener; single; experienced in private and commercial places; can furnish good references. Address J. A. G. care W. J. Stewart, 67 Bronfield St., Boston.

**SITUATION WANTED.**—By an experienced cut flower and plant grower and floral designer, as foreman; capable of taking charge of business. Good references as to character and ability. Address GROWER, care Am. Florist, Chicago.

**SITUATION WANTED.**—Foreman, florist, commercial or private; 25 years' experience in every branch of the trade, also cut flower and plant decorations, etc., in Europe and U. S. English; married; age 38; energetic; first-rate references. J. H. L., 604 11th St., N.W., Washington, D. C.

**SITUATION WANTED.**—By a first-class florist and gardener; German; with 15 years' experience; 5 years in this country; rose grower, propagator and general cut flower; understands forcing, grassy, fruit, vegetables and all other branches of the profession. Good references. Will take charge of place near big city. 32 years of age; married; small family. Address Ch. R., care American Florist.

**WANTED.**—To hire a greenhouse man, one who understands packing; single man preferred. Address GEO. THOMPSON & SONS, Louisville, Ky.

**WANTED.**—A first-class rose grower; none but one that understands and takes thoroughly. State wages. Address P. O. box 142, Alameda, Alameda Co., Cal.

**WANTED.**—Florist to occupy part of an old established undertaking establishment. Rent free for occasionally assisting the undertaker. Address 144 North Wells Street, Chicago.

**WANTED.**—An expert in cut flower work. To the right party a good position is offered; must have best reference as to ability and character. Only those having had considerable experience in best trade need apply. Address in person or by letter GRAHAM & GRIGG, 1204 Chestnut St., Phila.

**WANTED.**—A practical nurseryman and florist, one that is well experienced in commercial business, especially to propagate evergreens and roses, and be competent to take entire charge of a place. Married man only accommodated. Will pay a good salary or give an interest in the business. References required. Address Wm. RADAM, Austin, Texas.

**TO EXCHANGE.**—3 and 4 year old Calla roots for Holland bulbs, plants, ornamental grasses, baskets, etc. Address 52 Bellevue St., Hartford, Conn.

**FOR SALE.**—Florist store, well stocked, established 5 years. Am willing to make contract to furnish same with cut flowers. Wishing to devote my time to greenhouses, offer the above at a bargain. E. G. REIMERS, 47 4th Ave., Louisville, Ky.

**TO LEASE.**—A fine location for a greenhouse, near a union depot, in the most thriving city in Eastern Illinois, with shipping in eight directions by rail, or over four different express lines, without drainage or extra handling. Will furnish some capital to right party. Inquire of H. W. BECKWITH, Danville, Ill.

**FOR SALE.**—Five acres of land, two greenhouses 10x60, good dwelling, good new barn, two large cisterns, two wells, three force pumps, hose, 16 acres of land of 2000 inhabitants. Good trade in flowers and vegetables. Cause for selling, getting old, going south. Address JOHN M. EDDMAN, Youngstown, Ohio.

**FOR SALE.**—Two new greenhouses, built 2 years ago, 16x100 and 15x80 feet, with stock on hand, consisting of one house of roses and the other of carnations and chrysanthemums; one acre of land enclosed with board fence. Also 30 tons of coal. Located 13 miles from Chicago on the C. B. & O. R. R. Have also a good local trade. Will sell for \$2,500 \$1,500 in cash, balance on time. This is a good chance for an enterprising florist. Address R. H., care American Florist, Chicago.

**FOR SALE.** Ready Packed Crates of flower for sale in pots; great drive till January 1 to reduce stock: Thumbs \$2.50 per 100; 2 1/2 in. \$3.50; 2 1/2 in. \$5.50; 3 in. \$4.50; No. 2 Rose, \$4.00. See our "ad." this issue. SYRACUSE PORTERY.

## A. C. TUCKER,

Rose Grower,

P. O. Box 190. NYACK, N. Y.

Orders are solicited NOW for Spring delivery for the following plants, in any size pots and in any quantity:

PERLE DES JARDIN, NIPHETOS,  
BON SILENE, LA FRANCE,  
SOUVENIR D'UN AMI, C. MERMET,  
AMERICAN BEAUTY, BRIDE,  
PAPA GONTIER, PURITAN.

Special discount given on all orders received up to Feb. 15th, 1888. Send for circular giving prices and terms.

A. C. TUCKER.

## BULBS, ROSES

AND CLEMATIS.

HYACINTHS, Romans, white, single, for forcing.....	Per 100 \$ 4.00
" Mixed.....	4.00
" Colors.....	6.00
LILUM, Candidum, strong bulbs.....	4.00
" Longicaud.....	8.00
NEW ROSE—PURITAN, strong, 4-in. pots 75 cents each.....	
ROSES, H. P., strong, 2-years, from open ground, assorted, 2 1/2 to 3 ft. 10.00	
CLEMATIS, Jackmanii, 2-years.....	25.00
" Assorted.....	30.00
" Coccoloba.....	10.00

Bloomington (Phoenix) Nursery,

SIDNEY TUTTLE &amp; CO.,

Established 1852. BLOOMINGTON, ILL.

## OUR SPECIALTIES.

NOVELTIES IN ROSES  
AND OTHER PLANTS.

—) ALSO (—

FLORISTS' STOCK FOR FORCING.

## HILL &amp; CO.,

RICHMOND, IND.

## NOVELTIES IN ROSES.

Also the leading forcing varieties Teas, H. Teas and H. Remetals, 1,000 large roses in 6 and 7-inch pots; C. Mermet, La France, Sunset, Perles and Bon Silences, at \$2.50 per 100. Chrysanthemums, best varieties, 5 and 6-inch pots, \$15.00 to \$20.00 per 100. Bonardias, 2 1/2-inch pots, \$5.00 per 100. Gardena Radicans, \$8.00 per 100. Grand Duke Jasmine, @ \$5.00 to \$8.00 per 100. 3,000 American Holly, flex opaca, @ \$10.00 to \$12.00 per 100. Choicest buds and cut flowers at lowest market prices.

JACOB SCHULZ, LOUISVILLE, KY.

## IMPORTED H. P. ROSES,

Worked low on the Manetta Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagation quickly. Fine plants for sale by the 100 or 1,000, at low rates.

Address

WILLIAM H. SPOONER,

JAMAICA PLAIN, (Boston), MASS.

Budded Roses for Winter Forcing or Spring Market Sales—H. P. and Teas.

## SPECIAL OFFER:

The following varieties equal quantities of each, we sell for \$20.00 per 100.

H. P.—Anna de Diesbach, La France, Gen'l Jacqueminot, Paul Neyron, Queen of Queens, Comtesse of Oxford, Jules Margottin, Anna Alexiev, Mme. Gabriel Luize, Mme. Knorr, Marie Baumann, Gloire d'Yvetot, Her Majesty, M. de Lyon, Alfred Colomb. The following Tea Roses at \$12.00 per 100: Perle des Jardins, Mme. Lambert, Marie Van Houtte, Mme. Fickel, Mme. Charles, Niles, Franziska Krueger, Duchess Mathilde, Cornelia Cook.

Catalogue on application. Dormant buds of the new H. P.'s of 1887—Earl of Dufferin, dark, nearly black; Lady Helene Stewart, red. The new Tea Rose Miss Ethel Brownlow, similar to C. Mermet, very free flowering. All at \$1.00 each.

Cyclamen persicum, fine plants in buds which will flower in November. Baroness de Rothschild, Bennett, Papa Gontier, Niphotos in 6-inch pots, 50c. each.

F. O. BOX 78. COLLEGE POINT, LONG ISLAND, N. Y.

## E. BENARD,

ORLEANS, FRANCE.

ROSES ON THEIR OWN ROOTS

A SPECIALTY.

NURSERY STOCK OF ALL DESCRIPTIONS.

For particulars apply to

E. BENARD, JR., NILES, CAL.

## ROSES FROM OPEN GROUND.

A few thousand strong, healthy plants, mostly TEAS. Hybrids: Baroness de Rothschild, Merveille de Lyon, Paul Neyron, Jacqueminot, Giant of Battles.

EDWARD WACHENDORFF,

ATLANTA, GA.

BOUND VOLUMES OF  
THE  
AMERICAN FLORIST

VOLUME II.

Handsomely bound in cloth with leather back and corners, and title letters on back in gilt, may now be had from this office.

Price, \$2.25.

AMERICAN FLORIST CO.,

54 LA SALLE ST., CHICAGO.



## The Cut-Flower Trade.

### Floral Fashions.

BY OUR NEW YORK CORRESPONDENT.

Rich and bright effects are the style. Where blossoms of a modest color are employed, such as violets, ribbon of such conspicuous tint is used in such quantity that floral embellishments are particularly brilliant. The French knot is in high favor. This appears in most every position where a sash is used with flowers—on hand bunches for full dress, on large designs and favors, and on table and room pieces. This knot includes fifteen loops, and each loop consumes one yard of ribbon. A cluster of violets presented to Mrs. Potter the night of her debut had 1,000 flowers, and was tied with a French knot of purple satin ribbon. For a very fashionable wedding, where the bride was a widow, she carried a bouquet of Marechal Niel roses tied with a French knot of cream-colored satin ribbon.

The season of dinners was ushered in with one given at Delmonico's to Count de Brazza the evening before he sailed with his bride for Europe. The cloth was cream-colored satin. Through the middle of the board was an oval of plate glass to represent the ocean. This was supported on a band nine inches wide of Thorpe Jr. chrysanthemums. At one end, placed in a crescent, was "An revoir," in large letters of Neapolitan violets, and at the other end was "De Brazza," in the same flower. Each letter was the same on both sides, and a favor to be presented to a guest after the feast. The letters "An revoir" were attached by sashes, the colors red, white and blue alternating. The Italian colors alternated on the letter favors. "De Brazza," and were red, white and green. The sashes were drawn to the center of the plate glass ocean, and there a French knot was made—brilliant rosette of loops. Among these loops large boutonnières of forget-me-nots were laid. It will be seen that the prevailing style has reversed the placing of ladies' favors as a center and brought the men's buttonhole ornaments there. Boutonnières are made of immense size for dinners. A single large chrysanthemum, such as Mrs. Wheeler, is worn.

Fred. Gordon made a dinner arrangement for an entertainment given Henry Irving on the 6th inst. A star, five feet across, was composed of all the golden and bronze shades of chrysanthemums. This was festooned, fringed and finished with admirable taste. Loops of old gold ribbon formed a satin mat that showed only between the points of the stars. The boutonnières were formed of Roman hyacinths, there being from six to eight spikes in each. The room was profusely trimmed with autumn leaves, chrysanthemums and roses.

A superb dinner decoration was arranged at the St. James Hotel, where a bed of Cusin and Watteville roses was formed through the center of the board, on which was laid a pale lemon-colored satin cover, which was broadened with pink flowers. Among the roses, which are exquisitely beautiful in artificial light, were tender sprays of autumn leaves that matched their colors of the roses. Fairy lamps of pink and yellow rested on mats of autumn leaves; candelabra at each end of the table were trimmed with small branches brilliant with bright foliage, and mantels, buffet and windows were decked with branches and boughs.

Letter favors such as described for the De Brazza dinner are more fashionable than others. The name of the hostess or host is written, and also motto or date in different script in flowers, and the letters perfectly finished. A loop of ribbon is sometimes attached before the letter is presented. At young ladies' luncheons this style is quite the rage. The motto inscribed across the table is sometimes in French or German, and there are as many letters as guests. The motto is run across the cloth diagonally with foliage and loops of ribbon. Letters for cotillon favors have narrow ribbon loops and are arranged to form the motto or mottoes on panels, easels or screens of foliage, and are highly ornamental to the apartment when the dance takes place.

### New York.

Mr. James Reid is dangerously ill with typhoid fever.

A. Le Mout opens a floral parlor on Fifth avenue this week, where designs and decorations may be ordered from photographs.

A bouquet of seventy-five American Beauty roses, which had stems a yard long, was presented to Mrs. James Brown Potter the night of her debut.

The new chrysanthemum, Gen. Diaz, is having a great run; it is of the crushed strawberry color, a Japanese, and incurved.

Frank Hamilton has a fine floral establishment in the Langham Hotel.

The handsomest display of Mrs. Wheeler chrysanthemums ever made in New York was that at Eden Musee in Le Mout's exhibition.

Orders for decorations from a distance have begun early. Thorley sent flowers and two decorations to Atlanta, Ga., to make a wedding decoration.

Funeral orders have never been so large and of so costly a description in this city as this season.

### Boston.

"Are chrysanthemums an injury to the flower trade?" This perennial question is the one most frequently discussed just at present, and the poor chrysanthemum has to withstand some pretty severe assaults. Some jealous rose growers, indeed, have gone so far as to suggest a combination of growers, all of whom shall agree not to produce any chrysanthemums, and to boycott any dealer found handling them!

One of the most promising new establishments in the vicinity of Boston, and one that will surely be heard from prominently within a few years, is that of Peter Fisher at Montvale. There are five houses, each 100 feet in length, heated by hot water, and ventilated by an appliance originated by Mr. Fisher, which is one of the simplest and best methods of ventilating the writer has seen. Singular to relate, there is not a rose on the place. But there is a splendid house of Adiantum Farleyense, hosts of magnificent cyclamens, besides cypripediums, odontoglossums, cattleyas, Primula obconica, Cocos Weddelliana, and other choice things.

The Pennsylvania Hort. society has invited F. L. Harris, David Allan and Wm. Robinson to act as judges at their chrysanthemum show in Philadelphia. It is to be hoped that the good example thus set will be followed in the future by other horticultural societies. The advantages of such a plan are apparent,

bringing together as it does the brightest men from different sections of the country, making new friendships, and best of all, obviating the jealousies and discontent which are always sure to arise when awards are made by local judges. To the Society of American Florists and to the AMERICAN FLORIST are due in a large measure the broadened vision and liberal spirit which is thus exhibited. But those who had a taste of Philadelphia generosity a year ago are not likely to be surprised at anything good which the brethren there may do.

At the November meeting of the Gardeners' and Florists' Club the members were entertained with an account of the work of the Royal Horticultural Society of London by Mr. Jas. Farquhar. He described the noted gardens and houses at Chiswick and South Kensington, and gave an idea of the valuable work that is being done for horticulture by this institution, in testing new plants, investigating new processes, training skilled gardeners, and its general influence for good, being always ready to see and acknowledge true merit, and as ready to condemn that which is inferior or unreliable. His account of the management of the exhibitions of the society and of the work which is carried on in its trial gardens was particularly instructive. He said that on one occasion of a potato trial over 700 varieties were planted and their growth carefully watched, the final result showing that out of the 700 there were but 270 distinct kinds, all the others being pronounced synonyms. Similar results were arrived at in trials of geraniums and other plants. Every one interested in remedying the confusion of names of plants in this country will doubtless agree with Mr. Farquhar that a similar institution is one of our greatest needs here. One statement which he made was somewhat surprising, viz., that a very small proportion of the new varieties of plants produced in England are the result of the work of professional florists, but that the most enthusiastic and successful producers of novelties are men in other pursuits, such as lawyers, ministers, etc. The work of introducing new varieties, however, falls as a rule to the professional florist, and in many instances the name of the introducer is identified with the variety, while that of the producer is never heard of.

W. J. S.

### New York Retail Prices.

Perles, Niphotos, Souvs., \$1 to \$1.50 a dozen; Bon Silences, 75 cents; Mermes, Brides, \$1.75 to \$2.40; Mad. Cusin, \$1.75 to \$2; La France, \$2 to \$3; Cooks, \$3; Bennetts, \$1.50 to \$3; American Beauties, \$6 to 9; Puritans, 50 cents each; Mignonette, 75 cents to \$1 a bunch; carnations, 50 cents to 75 cents a dozen; hyacinths, \$1.75; violets, \$1.50 to \$3; lily of the valley, \$1.75; smilax, 50 cents a string.

ENGLISH CUT FLOWERS.—The blossoms of abutilons, pelargoniums, primulas and pyrethrums are regularly quoted in the reports of prices at Covent Garden market, London, while here such stuff would be classed as "hay," and the man who offered it for sale would be considered as "away off." Again, some flowers which are standard with us receive no attention there.

EASTON, PA.—A chrysanthemum show was held here Nov. 10-11. A feature was the plants of Mr. E. P. Wilbur, shown by his gardener Mr. John Cullen.

**THE AMERICAN FLORIST**

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 Cents a Line, Agate;  
Inch, \$1.40; Column \$14.00.  
Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per  
cent; 12 months, 20 per cent.

No reduction made for large space.

The Advertising Department of the AMERICAN  
FLORIST is for Florists, Seedsmen, and dealers in  
wares pertaining to those lines ONLY. Please to  
remember it.For Advertisements for December 1 issue must  
REACH US by noon, Nov. 25. Address,

THE AMERICAN FLORIST CO., Chicago.

**Catalogues Received.**

Wm. H. Smith, Philadelphia, florists'  
supplies; Jas. M. Thorburn & Co., New  
York, seeds; H. L. Wheatley, Altamonte,  
Fla., nursery stock; Selover & Atwood,  
Geneva, N. Y., nursery stock; W. J.  
Stewart, Boston, cut flowers and florists'  
supplies.

THE PRINTED REPORT of the proceed-  
ings of the Chicago convention has been  
received from Secretary Stewart. It is  
finely printed on good paper, and its 150  
pages contain the many valuable papers  
read at the meeting, with a complete re-  
port of the interesting discussions on the  
same. The great value of the contents  
of this report to any one in the florist  
trade cannot be estimated in dollars and  
cents. It is chock full of good, hard,  
practical matter that no live florist can  
afford to be without. Those who have  
not yet joined the society or have not  
yet paid their dues for 1887 can secure a  
copy and the badge of the society by  
sending their name and \$2 to Secretary  
Wm. J. Stewart, 67 Bromfield street, Bos-  
ton, Mass.

A SOCIETY for the prevention of "cru-  
elty to wild flowers" is considered by a  
correspondent of the New York *Post*  
necessary to prevent total extinction of  
these "fallen victims, perchance, to the  
greek of gain, which strips the ponds of  
the water lilies so thoroughly that none  
are left for seed, and depopulates the fields  
and brook sides of their flowery treasure  
to sell in the streets of our great cities;  
or to the carelessness and folly of ama-  
teur botanists, or even of genuine flower  
lovers, who dig up *all* the roots and pull  
*all* the flowers in the unlucky spots they  
visit."

**FOR THANKSGIVING DAY.****FOR THE HOLIDAYS,**

And for all other occasions where First-  
Class Flowers are required, ORDER IN  
ADVANCE, and you will be well served.

Read the following unsolicited Testimonials:

Flowers come in late in the order.  
J. S. WILSON & BRO.

TOLEDO, O., Dec. 27, 1886.  
The flowers you sent us last Friday were very  
fine.  
MRS. E. SUDER.

DETROIT, MICH., Dec. 25, 1886.  
The flowers were lovely and came through beauti-  
fully.  
JAS. V. ELKHORN.

NEW ORLEANS, LA., Jan. 10, 1887.  
Flowers came in first-class condition; very satis-  
factory.  
R. MATTHE.

MILWAUKEE, WIS., Oct. 22, '87.  
Everything came in fine shape and on time.  
FRANK WHITNALL & CO.

**OUR SPECIALTIES NOW ARE:**

LILY OF THE VALLEY, FINE ROSES, VIO-  
LETS, LONG STEMMED CARNATIONS,  
JAPANESE CHRYSANTHEMUMS,  
PRIMULA OBSCURA, ADIAN-  
TUM FARLEYENSE AND CUNEATUM.  
Holly, English Mistletoe, Fawn Leaves  
and Pine Plumes for the Holidays.

**WM. J. STEWART,**

Send for price list. 67 Bromfield St., BOSTON.

**Wholesale Markets.****Cut Flowers.**

	BOSTON, Nov. 10.
Roses, Teas.....	\$1.50
" Perles, Niphotos.....	5.00
" Mermets, Brides.....	6.00
" La France, Bennetts.....	8.00
" Am. Beauties.....	15.00
Lily of the valley.....	8.00
Tulips.....	5.00
Narcissus, paper white.....	5.00
Violets.....	7.00
Bouvardia.....	1.00
Smilax.....	12.50
Adiantum cuneatum.....	1.50
" Farleyense.....	12.50
Chrysanthemums, per bunch.....	1.50

	NEW YORK, Nov. 10.
Roses, Perles, Niphotos, Souv.....	\$4.00
" Bon Silene.....	2.00
" Mermets, Cousins, Dukes.....	6.00
" La France.....	10.00
" Cooks.....	8.00
" Bennetts, Brides.....	20.00
" Am. Beauty.....	2.00
Mignonette.....	2.00
Smilax.....	20.00
Violets.....	12.50
" short.....	.50
Hyacinths.....	6.00
Lily of the valley.....	8.00
Violets.....	1.50

	CHICAGO, Nov. 11.
Roses, Perles, Niphotos.....	\$3.00
" Mermets.....	5.00 @ 6.00
" Bennetts, La France.....	6.00
" Am. Beauty.....	15.00 @ 18.00
" Safranos.....	2.00
" Bon Silenes.....	5.00
Carnations, long stems.....	1.50 @ 2.00
" short stems.....	.75
Tuberose.....	1.50
Culms.....	12.50
Smilax.....	18.00
Violets.....	.75
Bouvardia.....	1.00
Chrysanthemums.....	1.50 @ 2.00

	PHILADELPHIA, Nov. 10.
Roses, Teas.....	\$1.50
" Perles, Niphotos.....	4.00
" Mermets, Brides.....	5.00
" Am. Beauty, Niels, Cooks.....	10.00
" Bennetts.....	8.00
" La France.....	4.00 @ 5.00
Carnations.....	.50 @ .75
Bouvardia.....	50
Smilax.....	20.00
Lily of the valley.....	8.00
Culms.....	10.00
Chrysanthemums, per bunch.....	.50

If you want FRESH FLOWERS of  
best quality, carefully packed and prompt-  
ly shipped, order from

**WM. J. STEWART,**

67 Bromfield Street, Boston, Mass.

MARIE LOUISE VIOLETS; LILY OF THE VALLEY;  
CHRYSANTHEMUMS AND ADIANTUMS.  
First Quality, in Unlimited Quantities.

**W. S. ALLEN,****WHOLESALE DEALER IN CUT FLOWERS,**

36 EAST 23rd STREET, NEW YORK.

ESTABLISHED 1877.

Price List sent upon application.

**W. F. SHERIDAN,****WHOLESALE FLORIST**

721 SIXTH AVENUE, N. Y.

Mention American Florist.

**LaRoche & Stahl,****Florists & Commission Merchants**

—OF—

**CUT FLOWERS,**1237 Chestnut Street, - PHILADELPHIA.  
Consignments Solicited. Special attention paid to  
shipping. Mention AMERICAN FLORIST.**EVERY FLORIST**

Should have our

**New Trade Directory.****Thos. Young, Jr., & Co.,****Wholesale Florists,**

INCORPORATED 1885,

23 West 23d St., NEW YORK.

**J. C. VAUGHAN,****WHOLESALE CUT FLOWERS**Direct all cut flower orders to cut flower  
department

VAUGHAN'S SEED STORE, 42 La Salle St., CHICAGO.

**WELCH BROS.,**  
**WHOLESALE FLORISTS,**

165 Tremont Street, BOSTON MASS.

We make a specialty of shipping choice Roses and  
other Flowers, carefully packed, to all points in  
Western and Middle States.  
Return Telegram is sent immediately when it  
is impossible to fill your order.

**HAMMOND & HUNTER,**

Wholesale dealers in

**Cut Flowers and Florists' Supplies**

67 West 30th Street, NEW YORK.

**GEO. MULLEN,**

17 CHAPMAN PLACE, (near Parker House),

**WHOLESALE AND COMMISSION DEALER IN****Fresh Cut Flowers & Florists' Supplies.**

Flowers carefully packed and shipped to all points  
in Western and Middle States.  
Orders by Telegraph, Mail, Telephone or Express  
promptly attended to.

**A. M. & J. B. MURDOCH,****WHOLESALE****CUT FLOWERS.**

510 SMITHFIELD STREET,

PITTSBURGH, PA.

Send for Price List.

**CHAS. E. PENNOCK,****WHOLESALE FLORIST,**

38 So. 16th Street, Philadelphia, Pa.

**C. STRAUSS & Co.**

Telephone 977-3. WASHINGTON, D. C.

Grower of and Wholesale Dealers in

**ROSES and OTHER CUT FLOWERS**

1000 Puritan Planted for coming Winter.

**CUT FLOWERS**

The choicest Cut Flowers at lowest market rates  
shipped C. O. D. Telephone connection. Use A. F.  
Code when ordering by telegraph. For prices, etc.,  
Address,

**J. L. DILLON, BLOOMSBURG, PA.****ROSS & MILLANG,****Wholesale : Florists,**

NO. 1168 BROADWAY.

(Former at 225 5th ave.)

Bet. 27th &amp; 28th sts.

NEW YORK.

**N. F. MCCARTHY & CO.****COMMISSION DEALERS**

IN CUT FLOWERS AND FLORISTS' SUPPLIES.

We make a specialty of Mermets, Niels, La France,  
Bennetts, Cooks, Portes, Niphotos, Grace and Anna  
Webb pinks, and all other flowers in variety.  
We price list nothing but first-class flowers and make  
a specialty of shipping all flowers invariably ship-  
ped at buyer's risk. We handle as fine a stock as  
Boston produces. Auction sales of bedding plants:  
Spring sales every Wednesday and Saturday from  
April 22 to June 15. Fall sales from Sept. 17 to Oct. 1.

WRITE FOR PARTICULARS.

63 Bromfield Street, (under Horli Hall),

BOSTON, MASS.



## Seed Trade.

SEED TRADE ASSOCIATION.—William Meggat, president, Wethersfield, Conn.; Albert M. McCullough, secretary, Cincinnati, O.

MR. WM. JOHNSON, of P. B. Mingle & Co., Philadelphia seedsmen, is dead.

EDWARD B. RICHIE of the firm of S. L. Allen & Co., Philadelphia, died at Moorestown, N. J., October 14, at the age of 40 years.

PASSED THROUGH CHICAGO: Wm. Meggat, Pres. Am. Seed Trade Association; J. A. Robbins, — Griswold, J. E. Northrup, Daniel De Cou, of S. L. Allen & Co.

MR. WM. REID, of A. B. Cleveland Co., has been very sick with typhoid fever, but was slowly improving Nov. 4.

THE TRADE are much interested in the frequent pea and bean bulletins issued by the A. B. Cleveland Co. They should be numbered and printed in the *FLORIST*, which goes to all the seed trade. Write us for rates, A. B.

A. C. KENDEL, the leading seedman of Cleveland, O., is dead. Mr. Kendel was the successor of the old house of Stair & Co., and at the time of his death was president of the newly organized Gardening and Floral Association of Cleveland. He was a very active and thorough business man, and was widely and favorably known by the seed trade. He was but 46 years of age.



Forcing of Bulbs for Winter Flowering.

• BY ERNST ARMUS.

Read before the Chicago Convention of the S. A. F.

MR. PRESIDENT, LADIES AND GENTLEMEN:—As I have been called upon, against my will, to write an essay on bulbs and tubers for winter flowering; and as I am neither a writer nor reader, I would beg your kind indulgence. I can merely give you my mode of treatment of such bulbs as I have been forcing successfully, and the varieties most generally grown for the New York market.

*Paper White Narcissus*.—One of the earliest bulbs forced is the Paper White Narcissus; it blooms in clusters, and, as its name indicates, is pure white. It grows to a height of about eighteen to twenty inches, and is very fragrant. These bulbs should be planted—any ordinary garden soil will do—about the latter part of August, for early forcing, so as to have them in bloom by November or December. The best plan is to plant in trays or flats, about three inches deep; plant about two inches either way, then set them on a prepared bed in the open air, and cover them with five or six inches of soil, after which they should have a thorough watering, and care be taken that they do not suffer from want of water after that, as keeping them damp will hasten their root-action considerably and of course get them to flower sooner. If a continuation of cut bloom is wanted, plant them at intervals of three or four weeks apart. The bulbs can be kept in a dry and cool place until the latter part of November, but care should be taken if kept as long as that to protect them from frost when planted, as they are not hardy. If wanted for pot-culture, the same course may be followed with the exception of

planting, which should be about four bulbs in a 6-inch pot. The first batch should be taken in the greenhouse about the middle of October, and kept in a temperature of 60° to 65°, and given as much light and air as possible.

*Early Roman Narcissus*.—These have the same habit and may be treated the same as Paper Whites. They also bloom in clusters, but with larger individual flowers of pale yellow, with deeper center, but do not bear nearly as large trusses, and are not very desirable for cut flowers.

*White Roman Hyacinth*.—This well-known favorite may be handled the same as the Paper White, but it is harder, and with a little covering, such as straw or similar material, may be kept out all winter, and taken in the house as convenient. The temperature should be from 60° to 75°, with plenty of light for December forcing; after that time from 55° to 65° is sufficient.

*Single Red-Skinned Romans*.—This is a variety not as well known as the old white. It is not as good for early forcing, but can be had from the latter part of January to February, when it will produce, on the average, about three good spikes to a bulb. Its color is white, with a light tinge of pink, which is rather admired by a great many.

*Double Red-Skinned Romans*.—A bunch of these has a very pretty effect, but they are not recommended for forcing.

All the above may be treated the same as the narcissus, and forced in the same temperature.

## DUTCH HYACINTHS.

These are, so far, mostly used for pot culture only; but I think the day will come when they will be used as much for cut flowers as tulips and narcissus are now. There is no other family of bulbs that has the perfume and richness of color which the Dutch hyacinth has, and the only thing that it may be lacking in is grace. The bulbs should be planted about the first part of September. For pot culture, one bulb in a four or five inch pot will do, but for cut flowers they may be planted in trays, otherwise treated the same way as all bulbs before mentioned, but as they are perfectly hardy, they may be taken in the house any time after December; for, unlike the Roman hyacinth, they cannot be made to bloom with any certainty or profit for the holidays, as is the case abroad. The reason I cannot give; it may be the climate, or it may be the effect of the sea air on the voyage across the ocean. Keep the plants for the first eight days when taken into the house, in a temperature of 45° to 50°, in any shaded spot (or turn a pot upside down over the crown), after that time they should be moved to a temperature of 60° or 65°. I will now name a few of the many varieties fit for forcing.

*Double Red and Crimson*.—Waterloo, Milton, Louis Napoleon, Princess Alexandra, Cochenille, Sans Souci.

*Double White*.—Anna Bianca, La Tour d'Auvergne, Blanchard, Prince of Waterloo, Grand Vainqueur, Nanette.

*Double Blue*.—Crown Prince of Sweden, King of the Netherlands, Charles Dickens, Lord Nelson, Laurens Koster, Murillo.

*Double Yellow*.—Bouquet d'Orange, Piet Hein, General Kohler, Goethe, Janne Supreme, William III.

*Single Red and Crimson*.—Lord Macaulay, Jenny Lind, Empereur of Reds, Satella, L'Incomparable, Von Schiller.

*Single Red and Rose*.—Anna Paulowna, Charles Dickens, Cosmos, Mrs. Beecher Stowe, Queen Victoria, Sultan's Favorite.

*Single Pure White*.—Grand Vainqueur, Mont Blanc, Grand Vedette, Queen of the Netherlands, La Candeur, La Grandesse.

*Single Dark Blue*.—Belle Africaine, Prince of Wales, Baron Van Thuyt, Leopold II, King of the Blues, Prince Albert.

*Single Light Blue*.—Lord Derby, Gladstone, Charles Dickens, Leonidas, Lord Byron, Prestley.

*Single Yellow*.—Victor Hugo, General Butler, King of the Yellows, Bird of Paradise, La Pluie d'Or, Ida.

## TULIPS.

These should be planted early in September; if for cut flowers, in trays, otherwise in pots. If in trays, for cut flowers, they may be planted close together, as I find it makes no difference in the size of the flower whether planted together or a couple of inches apart. Set the boxes or trays—which should be about two or three inches deep—on a prepared bed, and cover the same as directed for narcissus, and by end of November, cover with a heavy layer of straw, or similar material, to protect them somewhat against too much frost, as it will save a great amount of labor in winter when getting them in the house. This is the only reason for covering them, as they are perfectly hardy. By the latter part of November, the earliest forcing varieties, which ought under favorable circumstances, to be sufficiently rooted, should be taken in the house and kept in a temperature of not less than 65° nor more than 85°, with plenty of moisture and the house shaded with muslin, as this has the advantage of keeping out all cold air and drawing the flowers, giving them a long stem, which is essential for cut bloom. By January 15 the temperature in the house may be dropped to from 65° to 60°, as from that time on until spring they need less and less heat, but under no circumstances should they be taken in unless they have plenty of roots. I cannot impress this too strongly on the minds of my brethren, as bulbs of all kinds not sufficiently rooted, will certainly prove a complete failure. Should tulips be wanted for pot culture, plant as many in a 6-inch or larger pot as convenient, and follow the above rules with the exception that they must be grown in a light instead of a shaded house, and kept from 5° to 10° cooler. I now will give you a list of the most popular ones grown for the New York market.

*Scarlet and Red*.—Scarlet Duc van Thol, Crimson Duc van Thol, Vermilion Duc van Thol, Couleur de Cardinal, Scarlet Pottebakker, Rembrandt, Artus, Roi Cramoisi, Belle Alliance, Vermilion, Brilliant.

*Yellow*.—Duc van Thol, Chrysolara, Canary Bird, Yellow Prince, California, Yellow Pottebakker.

*White*.—Jacht von Delft, Jan Steen, La Reine, L'Immaculee, White Pottebakker, Pax Alba.

*Pink*.—Le Matelo, Rose Brillante, Rachel Ruissch, Rose Gris de Lin, Rose Apalite, Rose Luissante, Von Googien, Cottage Maid.

*Red and Yellow*.—Kaiser Kroon, Duc de Major, Duchess de Parma, Bizard Pronker, Duc de Berlin, Bizard Verdict, Duc de Nieuwerkerk, Cardinal's Hat.

## DOUBLE TULIPS.

These cannot be forced as early as the single ones, and should not be taken in the house before latter part of January, if perfect blooms and a financial success are desired. I herewith name a few of the best for forcing:

*Scarlet Red*.—Imperator Rubrorum, Purple Crown.

*White*.—Blanche hative, Vermilla, Rose Blanche.

*Yellow*.—Tournesol Red, Tournesol Yellow.

*Pink*.—Couroune de Rose, Le Blason, Roscina, Salvator.

*Red and Yellow*.—Couroune d'Or, Duc van Thol, Gloria Solis.

These comprise about all that have any value for forcing.

FREESIA REFRACTA ALBA AND FREESIA LEICHTLINI.

Both are very valuable for cut flowers, being deliciously scented and easily forced. The bulbs of these are very small—some not larger than a pea. They can be planted either in pots, trays, or on benches; either way will assure you a good crop; but if a succession of blooms is wanted, then they should be put in pots or trays. Begin planting about the first of August, leaving a space of about an inch either way, and continue at intervals of about three weeks. The pots or trays should be set out doors on a prepared bed of ashes, and watered sparingly until they are well started, when they should be watered freely. They should be protected from frost while out doors, but not covered with earth as hyacinths or tulips. The best plan is to remove them, as soon as frost sets in, to some cool house or pit from which they can be taken to the forcing house at convenience. The first batch should be taken in the house by Oct. 1, and if kept in a good light sunny position and a right temperature of from 60° to 75°, ought to be in bloom by the holidays.

#### LILY OF THE VALLEY.

This little favorite is rather uncertain to force, and a good many failures occur with the most successful growers. My way of treatment may not be same as followed by some of my brethren, but it has proved successful with me. I take the pips when first imported, and heel them in a cold frame, laying bunch by bunch in rows, and cover them with about three inches of earth. This is essential, for if the heads of the pips are exposed to severe frost and afterward taken in the forcing house, they will be found to rot or break off when touched. For early forcing take only three-year-old strong selected pips, with plenty of fibrous roots, and plant on benches in about five inches of sand, in rows three inches apart one way by one inch the other—only covering the roots and leaving the pips above sand in a house where you can maintain a temperature from 75° to 90°, with plenty of moisture. Water twice a day with tepid water, about the same temperature as the house, until the flowers begin to open, when care should be taken not to water overhead, as the flowers get easily water-soaked, which, of course, makes them worthless. Under no circumstances should they be rushed right into the forcing house after being received from abroad, as with such treatment they will most always turn out to be a total failure. Fresh imported Valley planted no earlier than Dec. 20 will turn out satisfactory every time, if treated in the right way.

ROCKFORD, ILL.—At a recent banquet in honor of a railroad man an elaborate design arranged by florist H. W. Buckbee was a floral "steam shovel" five feet long and three feet high. The body of the car was of white carnations, with columns supporting the canopy top of roses; the smoke-stack, boiler, water-tank and wheels of red carnations; and the "crane" of white carnations and bouvardia studded with Mermets.

#### Trade Notes.

MILWAUKEE.—Currie Bros. have opened a new seed store on Broadway. They have added a wholesale cut flower department to their business.

LANSING, MICH.—R. Mann & Son have a display of chrysanthemums and roses which the local press state to be the finest ever seen in this city.

SPRINGFIELD, O.—Thos. McBeth has sold out to J. M. Good & Co. McGregor Bros. have built an entire new set of houses. Florists here all report good fall sales.

ROCHESTER, N. Y.—The floral decorations at the wedding of Mr. Gilman N. Perkins and Miss Jessie F. Powers October 23 are said to have never been surpassed in Rochester.

WASHINGTON.—W. W. Kimmel, formerly head gardener at the Industrial Home school, Georgetown, is now with E. Cadmus; Ed. Bredemur succeeds him at the school. M. Durkin has bought out J. L. Jackson at 1817 E street NW.

LAWRENCE, KANS.—A joint meeting of the Missouri Valley and Douglas County Hort. societies was held at Edwarsville, about 25 miles east of here, October 15. Fully 150 were present and a very interesting meeting was had.

WESTFIELD, N. Y.—E. S. Bartholamew has built a new house 17x60. It is a three-quarter span and faces south southeast. It is heated by steam, the piping being entirely overhead, and consisting of five runs of 1½-inch pipe, each run being independent of the other if required. Mr. B. reports that he is much pleased with the work of the new system.

GRAND RAPIDS, MICH.—Business is very good. Nearly all have been adding to their capacity; Henry Smith has put up a house 21 x 130 for roses; Geo. Crabbe one 20 x 100; Renwick and Freyling have also added to their already large area. J. A. Hovey who has been established here six years and who started the first down town store has sold his business to Henry Smith of this city.

ST. LOUIS.—J. W. North is preparing to add more glass. F. Meyer has just returned from a three months' trip to Europe. Geo. Windler has built a new house 64 x 16. Wm. Schray has built a new rose house 60 x 16. Alex. Waldbart has added a new rose house 70 x 20. The subject discussed at the semi-monthly meeting of the Florists' Exchange was "Forcing roses for cut flowers." It was held at the greenhouses of the Jordan Floral Co. The next meeting will be held at the Commercial Club building.



#### TRY DREER'S GARDEN SEEDS

Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free.

HENRY A. DREER, Philadelphia

MELON SEEDS 14c. to 40c. per pound. Send for PRICE LIST. Odella, Black Spanish, Kolb Gem, Dark Ingot, Iron Clad, Pride of Georgia, Hackensack, Bird, Golden Gem, Banana. FREEMAN HURFF, Swedesboro, N. J.

PAPER SEED BAGS, BEST QUALITY, AT LOWEST PRICES.

Many years' experience in the Seed Business enables me to make Catalogue Work and Seed Bag Printing a Specialty. Refer to Phil's seedmen. GEO. A. KARR, Philadelphia, Pa.

#### GROWTAGE'S PATENT BUILDING FOR HORTICULTURE



—GLAZED WITHOUT PUTTY.—Endorsed by the New York Horticultural Society. Illustrated Circular mailed on application. Plans and estimates given for every description of Horticultural Buildings.

H. J. GROWTAGE, 76 Myrtle Avenue, BROOKLYN, N. Y.

#### SYRACUSE POTTERY

##### READY PACKED CRATES OF POTTS

Shipped at buyer's risk and freight; cash with order. Prices by the crate: 3150 Thumbs..... \$ 8.00; 2625 2½-inch, \$ 8.00; 1300 No. 3 Rose, \$ 7.00; 1875 2½-inch, 7.25; 1500 No. 2 Rose, 6.40; 1150 3-inch, 5.50; 1500 No. 1 Rose, 6.50; 875 3½-inch, 6.50; 1300 special 3½-inch, 6.00; 600 4-inch, 4.75; 300 5-inch, 4.40; 300 4½-inch, 3.50; 160 6-inch, 3.50.

##### FLORISTS' FLOWER POTTS ONLY.

Notice that prices on eight sizes are much lower than ever. All under 4-inch we must sell cheap now to get room for new machines, engine and boiler. Special prices quoted for big cash orders. Samples with first order. If you send a check add 10c. Send for prices, frt. rates and free samples by mail. Order now. You will never see price lower than these by the thousand—Thumbs, \$2.64; 2½-inch, \$3.00; 2½-inch, \$3.57; one special 3½-inch, \$4.61 as quoted above. Cash orders shipped immediately.

J. N. PERKINS, Manager, Syracuse, N. Y.

ONLY POTTERY MAKING A SPECIALTY OF

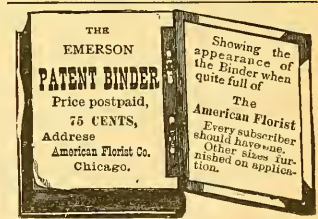
#### FLOWER POTTS

FOR FLORISTS.

THE WHILLDIN POTTERY CO.,

713 & 715 W HARTON ST.,

PHILADELPHIA.



#### CLOSING OUT SALE.

Of the Finest

IMPORTED

ARTIFICIAL FLOWERS.



The entire stock sold at half price. A good chance to start in business or to buy part cheap.

PHILIPP BONTE, IMPORTER, 111 Fifth Avenue, CHICAGO.

25c. In Postal Note, Silver or Slups. SEE WHAT IT WILL BUY.

1 copy "How to Propagate and Grow Fruit," price 50c.; 1 copy "Pocket Chart of 400 Co-operative Associations," price 25c.; 3 copies each numbers American (Mich.) Horticulturist (different dates), price 10c. each. Total \$1.05, all for 25 cts. postpaid. Address

LEAVENWORTH & BURR, B. I. DETROIT, MICH.



## Washington.

The chrysanthemum opening on Monday last at the Snalls' new place of business, corner of Fourteenth and G streets, inaugurated a new era for seasonal floral displays at the national capital. I doubt if anywhere in the country finer grouping of colors and a more effective arrangement of this growing fall favorite can be seen. The large front bay window represented a bridal scene; the floor carpeted with chrysanthemums in imitation of a rich Persian rug, settees, easy chairs, center table and ottomans all made up of the favorite fall flower, while two elegant vases some three feet high, made up of pure white chrysanthemums, graced each side. From the ceiling hung suspended to braces of chrysanthemums a white marriage bell, beneath which stood the bride and groom. The whole was inclosed with garlanded ferns in the form of two immense curtains, partly unfolded. The two other large bay windows were filled with exquisitely grouped plants backed by ferns and palms, while along the entire center of the store room ran a low counter, on which on both sides, densely packed, were arranged according to color, tier upon tier growing plants, the uppermost pure white, luxuriant in purity and gracefulness.

The side counters were loaded with low vases containing loose chrysanthemums of every variety and color known, there being something like 100 different varieties displayed. In addition, several large folding screens made up of ferns and decorated with designs of chrysanthemums, such as a fan of bright yellow and maroon, etc. The large mirror in the establishment was flanked by a border two feet wide of maidenhair ferns in pots arranged on invisible racks, the whole having a rich canopy of chrysanthemums surmounted by ferns and palms, from around the border of which trailed down delicate tresses of tenuissimus.

The Freemans, Saul, Hale, and lastly Fisher in his recently opened place of business on Pennsylvania avenue, are apparently all doing a good business in chrysanthemums, while Louis Schmid & Sons, in florists' supplies, seem to be having a tremendous run on bulbs, of which they have been compelled to replenish their stock, so great has been the demand—the government alone absorbing several hundred thousand bulbs for the public gardens and parks. Z.

## Cincinnati.

J. A. Peterson and Tom. W. Hardesty of the Floral Exchange went to Indianapolis to exhibit in the flower show there. They took with them half a dozen designs, a mammoth hat, a megatherian letter "T," a star and a dinner piece. In addition to these they made a splendid show of cut chrysanthemums.

"Chrysanthemum dinners" are all the go. Everybody has gone chrysanthemum crazy.

This is going to be a season when foliage will be largely used in decorations.

Said Mr. McKinney of the Floral Co.: "I am waiting for a man with money enough to pay for something new in floral designs. Business is good, but nothing out of the conventional flat or basket seems to be used."

Snowshoes filled with chrysanthemums were the decorations noted at a recent dinner.

Wicker fans and hats of all conceivable shapes filled with roses and surmounted

by tiny birds were the favors distributed at a luncheon this week.

A great butterfly, seven feet wide, was made by Harry Sunderbruch. It was made entirely of roses, the body of pink and yellow and the wings formed of clusters of blossoms of various tints.

The handsomest design seen in Cincinnati for a long time was that made by Gardner and presented by the Young Men's Blaine Club to Governor Foraker. Ten thousand citizens witnessed the presentation and cheered for fully five minutes. The governor's portrait was in the center, framed with roses. This was affixed upon a column of ferns and roses, while above that was a floral eagle bearing in its beak two American flags. Over the eagle was a plumed helmet—the insignia of the Blaine Club—also made of flowers. A scroll inscribed "Vim, Vigor and Victory" was another section of the design. The base was of ferns, and a massive, beautiful design it was.

REN MULFORD, JR.

## VAUGHAN'S Special Holiday List is Ready

WRITE FOR IT.

Bulbs now ready, SPIREA, L. AU-RATUM, Hyacinths in colors, TUBER ROSES, L. of Valley (by Nov. 20.)

**J. C. VAUGHAN, 42 LA SALLE STREET, CHICAGO.**

**EFFECT OF USING "GRAPE DUST"**  
**FOR MILDEW IN LARGE GREENHOUSES.**

NEWBURGH, N. Y., October 25, 1887.

MR. HAMMOND, Dear Sir:—

I must thank you for the prompt delivery of the keg of "GRAPE DUST" to Mr. Wm. C. Wilson. I was at Mr. Wilson's place, Astoria, L. I., the other day, so I recommended your "GRAPE DUST," and he ordered me to send him a hundred pound keg for trial. If it was not good I should not have recommended it.

Now, in regard to your "GRAPE DUST" I must say that when I first heard of it I had but little faith in it, because I had tried all the remedies for mildew I had ever heard of, but they were of little value. It seems that my location favors Mildew especially. When other florists are but little troubled, my houses are generally well covered with the Mildew, so when I sent for the first keg of "GRAPE DUST" my roses were almost worthless, but since using the "GRAPE DUST" my roses are the "Picture of Health." There is not a vestige of Mildew to be seen on my place, and my roses fetch double the price, besides I have saved a month of time, which I used to be compelled to do to kill Mildew.

Yours respectfully,

F. J. A. SCHAEFER, FLORIST.

For Samples send stamps to HAMMOND'S PAINT AND SLUG SHOT WORKS, Fishkill-on-Hudson, N. Y.  
Sold by the Seedsmen.

THE AMERICAN FLORIST COMPANY'S

• : DIRECTORY : •

OF

FLORISTS, NURSERYMEN AND SEEDSMEN

OF THE

UNITED STATES AND CANADA.

1887.

PRICE ONE DOLLAR.

The most complete and accurate list yet published. The key designates the particular branch of the trade each one is engaged in. The street and number of those living in cities will insure the delivery of lots of catalogues which have hitherto remained dead in the office to which they were addressed. At this low price every one in the trade can afford to have a copy for reference. Address

AMERICAN FLORIST CO.

54 LA SALLE ST., CHICAGO.

### Mad. Pollock Geraniums.

Per 100	
2 1/2-inch pots.....	\$5.00
3-inch pots.....	8.00
3 1/2-inch pots, the stock plants.....	10.00

CASH WITH ORDER.

HENRY NEENER, LOCK HAVEN, Pa.

• PEACH • PITS •  
FOR • NUSERYMEN.

We offer the following at net cash prices, f. o. b. cars at Philadelphia—sacks included. They are put up in sacks containing two bushels by measure.

TENNESSEE NATURAL, \$2.00.

VIRGINIA NATURAL, \$1.75.

SMOKES, \$1.25, and

MIXED at \$1.00 per Bushel.

CATALOGUES FREE.

Wm. H. SMITH, Seedsman,

P. O. Box 1570. 1018 Market St., PHILADELPHIA.

Mention American Florist.





## Dutch Bulbs.

*R. van der Schoot & Son.*

HILLEGOM (Near Haarlem)

HOLLAND.

ESTABLISHED 1830.

GROWERS OF

Hyacinths, Tulips, Crocus  
Narcissus, Lilies, Etc.

Intending purchasers, before or-  
dering Bulbs, write us for a  
Catalogue.  
Mention Am. Florist.

A CIRCULAR OF DESCRIPTION, &C., FOR OUR

# New Tomato, "Volunteer,"

— AND —

# New "Carnation Striped" Zinnias,

Will be sent to the trade during this month, in time to  
insert in Spring Catalogues.

## V. M. HALLOCK & SON,

## QUEENS, NEW YORK.



### READY NOW:

Fine LILY of the VALLEY PIPS and SPIREA JAPONICA  
CLUMPS. Extra Fine TUBEROSE BULBS, PEARL  
and ITALIEN.

STILL IN STOCK:

HYACINTHS, TULIPS, NARCISSUS, ROMAN HYA-  
CINTHS, LILUM CANDIDUM, LILUM AURATUM,  
LILUM RUBRUM, LONGIFLORUM, &C., &C.

FOR THE HOLIDAYS.

HOLLY, BOUQUET GREEN, WREATHING, HOLLY WREATHS,  
PAMPAS PLUMES, IMMOITELLES, &C., &C.  
Send for Catalogue and Special Holiday List.

### JAMES KING,

170 LAKE ST., CHICAGO.

## AUGUST RÖLKER & SONS,

NEW YORK.

— Supply the Trade. —

## DUTCH BULBS!

Catalogues on application.

## C. H. JOOSTEN,

IMPORTER,

3 Coenties Slip, NEW YORK.

Mention American Florist.

## DAHLIA \* \*

### \* ODORATA.

Sweet-scented Single Dahlia, very dark  
black-brown, excellent for fine floral  
work, offered in original roots, at

\$2.50 EACH; 10 FOR \$22.50.

## J. SIEKMANN,

Kostritz (Thuringia), GERMANY.

### SMILAX.

10,000 Strings of Smilax for the trade. Steady con-  
tracts solicited.

F. E. FASSETT & BRO.,  
ASHTABULA, OHIO.

FRENCH AND AMERICAN

## NOVELTIES FOR 1887

— IN —

ROSES, CARNATIONS, CHRYSAN-  
THEMUMS, GERANIUMS, ETC.

Special offer of

OUR NEW SEEDLING WHITE CARNATION  
SILVER SPRAY,

The Best White for Florists' use.

We have also a splendid stock of Geraniums and  
Fuchsias in 2½-in. pots, of last spring's propagation.  
Our Fall Price List with prices and descriptions  
now out; send for a copy.

## W. P. SIMMONS & CO.

GENEVA, OHIO.

☞ We issue no Retail Catalogue.

### CLEMATIS.

Per Doz.  
12 fine varieties Clematis..... \$2.50  
12 fine varieties Moss Roses, 2 year..... 1.50  
10 choice Grape Vines, Niagara..... \$1.00 @ 2.00  
50 varieties Dahlias, ground roots..... 1.50  
Ampelopsis Veitchii, 2 ft..... 1.50  
12 Chinese Paeonies in var..... 1.00  
12 Downing Gooseberry..... 1.00  
Above in quantity at very low rates. Also all kinds  
harry and monthly roses, bulbs, greenhouse plants,  
mulberry, Irish juniper, &c. Inquiries promptly  
answered.  
F. A. BALLER, Bloomington, Ill.

## F. E. McALLISTER,

— WHOLESALE DEALER IN —

Seeds For the Florist  
Market, Garden-  
er and Farmer.

Requisites, Im-  
mortalis, Grasses,  
Mosses, Boquet Pa-  
pers, Pampas, etc

Bulbs For the Green-  
house or Gar-  
den.

22 Day Street, - - NEW YORK.

# GRAND \* STOCK \* PLANTS.

## MAMMOTH VERBENAS

(One plant of which now, is worth ten in January.)

12 finest selected market sorts, \$3.00 per 100; \$25.00 per 1,000; embracing best  
contrasting colors.

GERANIUMS—12 best double market sorts, \$6.00 per 100; \$50.00 per 1,000.

PRIMULAS—Single, six distinct colors, \$6.00 per 100; \$50.00 per 1,000.

SMILAX—\$4.00 per 100; \$30.00 per 1,000.

NEW WHOLESALE LIST SENT ON APPLICATION.

## PETER HENDERSON & Co.,

35 and 37 Cortlandt Street, NEW YORK.

We Again Offer our  
First-Class Holly—Good  
Green, Plenty of Berries,  
and can quote Special  
Rates to important points  
North, South and West.

# HOLLY

Per Case, \$5 00; 3 Cases for  
\$13.50. Larger Lots on applica-  
tion. Order Early, and you will  
have the Holly in ample time.  
We can refer to Florists in all  
large cities. THOS. G. HAROLD,  
Kingston, Somerset Co., Md.

### SPECIAL LIST.

Hyacinths in colors.....	Per 100
Hyacinths, Romans.....	\$ 4.00
Tulips, double and single.....	3.50
Narcissus, Paper White and Poeticus.....	2.50
Lily of the Valley (ready in November).....	2.25
Carnations, Hinz's White, strong.....	2.00
Roses, Gen. Jacquemont.....	15.00
Send for Fall List, now ready.	4.00

A. GIDDINGS, DANVILLE ILL.

## BULBS! BULBS! BULBS!

Before placing your order for HOLLAND BULBS  
write me for my trade list. I have made special  
arrangements with some of the largest growers  
in Holland, and can offer you TERMS and  
PRICES better than any other firm does. All  
orders over ten dollars will receive a CREDIT un-  
til May 1, 1888. Write for terms and prices.

E. HIPPARD, Youngstown, Ohio.





**Double White Primulas.**

Ready for flowering pots, \$10 and \$12 per 100, out of pots carefully packed.

**S. TAPLIN,**

DETROIT, MICH.

**TOBACCO STEMS FOR FLORISTS,**

FOR SALE, packed in bales 200 to 250 lbs.

NO CHARGE for delivering to depots.

**PRICE:**

From \$8 to \$10 per ton, according to quantities.

ADDRESS

**P. C. FULWEILER,**

716 Arch Street, PHILADELPHIA, PA.

**DOUBLE PRIMROSES.**

**Extra Large**

**CANE STAKES FOR ROSES.**

**ROSES.**

**BRIDE, DUKE,**

**NINETOS, PERLE,**

**BENNETT,**

**LA FRANCE,**

And others. All grown from selected wood for bench planting.

SEND FOR SUMMER TRADE LIST.

**GEO. W. MILLER,**

(Successor to Miller & Hunt.)

**WRIGHT'S GROVE, CHICAGO.**

Mention American Florist.

**OUR NEW TRADE DIRECTORY**

Contains over

**6,000 Names of (Live)**

Florists, nurserymen and seedsmen, in the United States and Canada.

**PRICE ONLY ONE DOLLAR.**

AMERICAN FLORIST CO., Chicago.

**THE BEST AND CHEAPEST DOUBLE PETUNIA SEED**

(*P. hybrida grandiflora fl. pl.*)

in the market. For sale to the trade by the grower.

**G. A. McTAVISH,**

NORTH SAANICH, B. C., CANADA.

**My** **WHOLESALE AND DESCRIPTIVE Catalogues** for 1887, of Bedding Plants, Roses, Palms, Orchids, etc., mailed to all applicants. Large stock of the following on hand at cheap rates: *Ampelopsis Veitchii*, various sizes *Tea*, and *Hybrid Roses*, all the leading sorts, named *Chrysanthemums*, *Dracæa Indivisa*, various sizes, *Echeverias*, *Small Ferns*, *Geraniums*, double and single, best named sorts, *Areca Lutescens*, in 2½, 4, 5, and 6-inch pots, *Lalania Borbonica*, *Seaforthia Elegans*, *Oreodoxa Regia*, *Corypha Australis*. Other Palms, such as *Cocos Weddelliana*, *Chamærops Excelsa*, *Phoenix Reclinata*, *Phoenix Rupicola*, *Phoenix Tennis*, *Kenilias* of sorts. *Glazivora Insignis*, fancy named *Clematis*, and other vines, etc. Prices given on application.

**WM. C. WILSON, FLORIST,**

Steinway's, Astoria L. I.



**Rare Japanese Shrubs,**

**PALMS, BAMBOOS,**

Orchids, Ferns and Fruit Trees.

**35 VARIETIES LILY BULBS.**

We mail free for \$1 00 5 choice Japanese Lily Bulbs, or 3 choice rare Chrysanthemums.

12 Mammoth Japanese Chestnuts for 50c. All our stock is raised carefully in our nurseries in Japan. CATALOGUES FREE.

**H. H. BERGER & CO.,**

Proprietors of GEORGE SILVESTERS' SEED HOUSE,  
P. O. Box 1501. 315 & 317 Washington St.,  
SAN FRANCISCO, CAL.

**FOR SALE.**

Per 100

Very choice Hybrid Cinerarias from 3-in. pots, strong plants, ..... \$4 00  
Saxifrage from 2½-in. pots, ..... 2 00  
Hoya or Wax Plant, strong, from 3-in. pots, ..... 6 00  
or per dozen, \$1.00.

**JOHN B. FABER, KANKAKEE, ILL.**

**CLEMATIS CRISPA.**

**FOR SALE**

By the Hundred or Thousand.

**H. STEINMETZ, RALEIGH, N. C.**

**FOR SALE CHEAP.**

A fine lot of Moss Roses from open ground. Also a lot of Eucharis Amazonica in pots.

**H. W. HALES,**

Ridgewood Floral Nursery. RIDGEWOOD, N. J.

We can now furnish in any quantity desired Debit and Credit Tickets of which we give below full size samples.

**DEBIT.**

188

**CREDIT.**

188

The debits are printed in black and the credits in red, so they can be readily distinguished. They are put up in blocks of 100; 50 of each, placed back to back; thus but one block will have to be carried. By means of these tickets an entry of a sale or receipt of goods can be made anywhere—in the house or in the field—and afterwards filed. Tickets for each transaction in your business will make data from which a book-keeper can readily work. With this simple and easy means of keeping a record of your business can you afford to neglect so important a matter?

Price of Tickets, postpaid, 100, 20c.; 200, 35c.; 300, 50c.; 500, 75c.; 1000, \$1.40.

**AMERICAN FLORIST COMPANY,**

54 LA SALLE STREET, CHICAGO.









## Substitution.

Do you know that your plants are correctly labeled? Do you know so, or do you merely think so? Complaints have been made of those whose high character is a sufficient guarantee that the substitution was the result of error rather than intention. While such stand always ready to correct any error, they cannot reimburse the buyer for the time and advantage lost by such error. In addition to this, "It was a mistake," is the invariable excuse, when detected, of those who do intentionally substitute. The honest grower or dealer should therefore use unusual effort to guard against such errors, that he may not be classed as a fraud through a defective system of labeling or carelessness. Do you permit only thoroughly competent men to handle your stock, or watch the same while it is being transferred from one house to another, or pick out orders? Or is this important matter frequently relegated to some thick-skulled laborer who doesn't know a geranium from a force-pump?

Those who substitute—either unintentionally or designedly—should also remember that they are not only morally but legally liable. Should a victim enter a suit for damages, any impartial court would undoubtedly award the full amount, if the facts were proven. Possibly such an action—as a test case—would establish a precedent which would be valuable to the trade and put an effective damper on the professional substitutor. Unfortunately, the amounts involved are usually so small that the victim pockets the loss rather than waste his time in suing; but if a number should join together in such a suit, it would be worth their while, and things could be made exceedingly interesting for the one against whom it was brought. The data obtained by the committee on substitution of the S. A. F. could be employed to excellent advantage in determining the party against whom such a test action might be brought to have the most lasting effect on the others indulging in the same practice.

The evil is a blot upon the fair name of the whole trade, and must be removed. If gentler means have no effect, then heroic treatment must be adopted. All honest men—and we feel positive that but a very small fraction of the trade is otherwise—are done a serious injustice by tolerating this vice, and they all stand ready to assist by their influence and help to crush it out.

ALLEGHENY CITY, PA.—Superintendent Hamilton has about 1,000 plants of chrysanthemums in bloom in the Allegheny Park greenhouses. They make a brilliant display. A handsome seedling is named Agnes Hamilton, after the superintendent's daughter.



ALL SIZES OF SINGLE AND DOUBLE THICK

GLASS FOR GREENHOUSES.

ALL GLAZIERS' SUPPLIES.

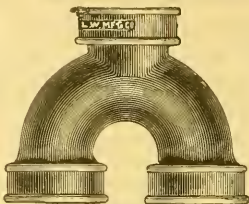
Write for Latest Prices.



FOR THE TRADE.  
**FLORAL WIRE DESIGNS.**  
JAS. GRIFFITH,  
THE PIONEER MANUFACTURER IN THE WEST,  
305 Main Street, CINCINNATI, OHIO.  
SEND FOR WHOLESALE PRICE LIST.



## Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

## GET THE BEST!

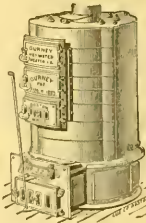
Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

Mention American Florist.

L. Wolff Mfg. Co., 93 to 111 W. Lake St. CHICAGO

## GURNEY'S NEW HOT WATER HEATER.

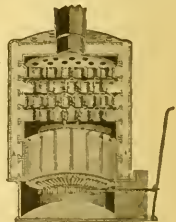
THE CHEAPEST AND BEST FOR  
Greenhouses, Conservatories and  
DWELLING HOUSES.



THE GURNEY HEATERS present more water surface to the direct action of the fire than any others (known to us) in use. They are the easiest to keep clean, and with due attention almost any kind of fuel may be used.

EASILY REGULATED.  
SIMPLE AND EFFICIENT  
SAFE AND ECONOMICAL.

Manufactured by the  
GURNEY HOT WATER HEATER CO.,  
237 FRANKLIN STREET, BOSTON, MASS.



JOHN A. FISH, Managing Director,  
SEND FOR PAMPHLET AND PRICE LIST.

SELLING AGENCIES.—M. H. Johnson, 140 Centre Street, New York. Rice & Whitacre Manfg. Co., 42 and 44 W. Monroe Street, Chicago (West and Southwest). E. R. Chase, 31 Edmund Place, Detroit, Mich. (for Michigan and Ohio). Wm. Gardner & Co., Portland, Oregon.

## SASH BARS MADE OF CLEAR CYPRESS LUMBER.

Equal to Red Cedar in durability. Plain Bars  $1\frac{3}{8} \times 1\frac{1}{4}$  inches kept in stock. Price 2 cents per lineal foot. F. O. B.

Lockland Lumber Company, Lockland, Hamilton County Ohio.

## Ives' Putty Machine.

Patented Jan. 8, 1887.

The best device ever invented for laying putty. With this you can make old leaky sash perfectly tight without removing the glass. It will do the work of five men in bedding glass.

Sent by Express on receipt of price, \$3.00.

J. H. IVES, DANBURY, CONN.

## GREENHOUSE HEATING.

BY A. D. FOWLER.

Explains fully all the best systems of heating greenhouses by both hot water and low-pressure steam. Tells you the points to consider in selecting an apparatus. How to adjust same to various locations; gives the results of the latest scientific experiments. Shows how to compute the number of feet of pipe required for a given space; draft and other important matters.

It is highly commended by Mr. John Thorpe and others. Postpaid, 7c.

Sent on receipt of price. Address,  
AMERICAN FLORIST,  
CHICAGO.

## PIPE AND FITTINGS FURNISHED

—TO—  
PLANS AND SPECIFICATIONS.

Contracts solicited for  
HEATING GREENHOUSES.

Most improved plans.  
ALL WORK GUARANTEED.  
20% Prices reduced on application.

E. A. STIMSON & CO.,  
No. 22 and 24 Sears Street,  
DAYTON, OHIO.

Delegates to the next  
convention will travel  
via the

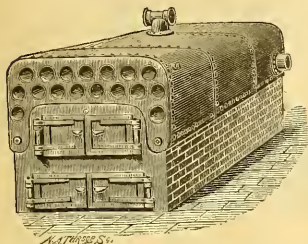
**PULLMAN CAR LINE**  
TO AND FROM  
Louisville, Indianapolis, Cincinnati and the winter resorts of Florida and the South. For full information address  
**MONON ROUTE**  
E. O. McCormick, Gen. Passenger Ag't, Chicago.

ESTABLISHED 1854.

**Devine's Boiler Works**

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers.



Capacity from 350 to 10,000 feet of four-inch pipe.  
Send for New List.

**PETER DEVINE,**

387 S. CANAL ST.,

CHICAGO.

ESTABLISHED, 1866.

Floral Wire Designs,

Manufactured by

**N. STEFFENS,**

335 East 21st Street, - NEW YORK.

**Conservatories**

GREENHOUSES, ETC.

Erected in any part of the U. S. or Canada  
Glazed on the

Helliwell Pat. Imperishable System  
OR WITH PUTTY.

For further testimonials, illustrated catalogue or  
estimates address

**JOSEPHUS PLENTY.**

HOPTICULTURAL AND SKYLIGHT WORKS.

Offices, 144 Pearl Street, NEW YORK.

**FOR SALE.****THE CUTS**

USED IN ILLUSTRATING THIS PAPER.

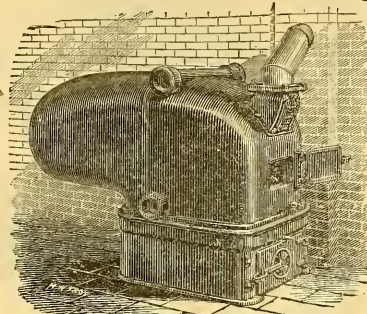
Write for prices on any which you have seen  
in previous issues and would like.

**AMERICAN FLORIST CO.**

CHICAGO.

**HALES' MOLE TRAP**

For destroying ground moles in lawns, parks,  
gardens and cemeteries. The only PERFECT  
mole trap in existence. Guaranteed to catch  
moles where all other traps fail. Sold by  
seedsmen, Agricultural Implement and Hardware  
dealers, or sent by express on receipt of \$2.00 by  
H. W. HALES, RIDGEWOOD, N. J.

**Greenhouse Heating AND Ventilating****HITCHINGS & CO.**

233 Mercer Street, New York.

Five Patterns of Boilers,  
Eighteen Sizes,  
Corrugated Fire Box Boilers  
Saddle Boilers,  
Conical Boilers,  
Base Burning Water Heaters  
Perfect Sash Raising Apparatus.

Send 4 cents postage for Illustrated Catalogue.

**SOMETHING NEW.**

Our 3-Piece Mailing Box for Florists and Nurserymen.

Our boxes are the pride of the Florists, and  
are acknowledged by all to be the strongest, yet  
the lightest and desirably the neatest box made.  
We will send price list and sample box FREE.

**SMITH & SMITH,**

KENTON, Hardin Co., OHIO.

**10,000 ELECTROS.**

Send for List of Catalogues.

THE

**American Florist Company's****• DIRECTORY •**

OF

{ **FLORISTS,**  
**NURSERYMEN,**  
AND **SEEDSMEN,**

OF THE

**UNITED STATES AND CANADA.****1887.****PRICE ONE DOLLAR.**

The most complete and accurate list yet published. The key designates the particular branch of the  
trade each one is engaged in. The street and number of those living in cities will insure the  
delivery of tons of catalogues which have hitherto remained dead in the office to which  
they were addressed. At this low price every one in the trade can afford to  
have a copy for reference. Address

**AMERICAN FLORIST CO.,****54 LA SALLE ST., CHICAGO.**



## Index to Advertisers.

Advertising Rates, etc.	163	Leavenworth & Burr, J.	165
Allen, W. S.	163	Lockland Lumber Co.	172
Bailey, F. A.	167	McAllister, F. E.	167
Bancroft, J.	168	McCarthy, N. F. & Co.	163
Bayersdorfer, M. M. & Co.	170	McFarland, J. Horace	171
Benard, E. Jr.	161	McTavish, G. A.	169
Bene, Albert	171	Michel Plant & Seed Co.	172
Berger, H. H. & Co.	169	Miller, Geo. W.	168
Blanc, A.	173	Monon Road	172
Bloomington Nursery	161	Mullic, Geo.	163
Bonte, Philipp	165	Murdoch, A. M. & J. B.	161
Boynton, W. D.	168	Myers & Co.	174
Brackenridge & Co.	171	Neener, Henry	174
Brasque, L. B.	170	Pennock, Chas. E.	165
Carnody, J. D.	174	Perkins, J. N.	165
Cook, J.	168	Pienly, Joseph E.	175
Desmond, Wm.	171	Price, Charles S.	170
Devine, Peter	171	Reed & Keller	173
Dier, John L. & Co.	170	Roemer, Frederick	171
Dillon, J. L.	163	Rolker, Aug. & Sons	167
Dreer, H. A.	166	Ross & Millank	165
Dudley, J. W. & Son	171	Schaltheis Bros.	161
Elliot, B. A. Co.	170	Schulz, Jacob	161
Evans, Chas. F.	168	Scollay, John A.	174
Exeter Mach. Wks.	174	Shaw, E. D.	168
Faber, J. B.	169	Sheridan, W. F.	163
Fassett, F. E. & Bro.	168	Siebrecht & Wadley	171
Fink & Co.	171	Siekman, J.	169
Fulweiler, P. C.	169	Simmons, W. P. & Co.	167
Gasser, J. M.	174	Situations, Wants, etc.	161
Giddings, A.	167	Smith & Smith	167
Goldman, M.	167	Smith, W. H.	169
Griffith, Jas.	172	Sponck, Wm. H.	161
Growth, Henry J.	165	Starr, Chas. T.	171
Gorney Heater Co.	172	Steffens, N.	173
Hales, H. W.	169, 173	Steinmetz, H.	169
Hallock, W. H. & Son	167	Stewart, Wm. J.	163
Hammond & Hunter	166	Stimson, E. A. & Co.	172
Harold, Thos. G. Jr.	171	Struss, C. C. & Co.	161
Henderson, P. & Co.	167	Taplin, S.	169
Herr, Albert M.	171	Thompson, G. & Sons	171
Hieble, Ad.	168	Trischler, N. & Son	168
Hiley, Henry G.	171	Tucker, A. C.	161
Hill & Co.	163	Van der Schoot, R. & Son	167
Hilliard, E.	167	Vaughan, J. C.	163, 166
Hinchings & Co.	173	Wachendorf, Edw.	161
Hooker, H. M.	172	Weathered, Thos. W.	174
Huff, Freeman	165	Welch Bros.	163
Ives, J. H.	171	Whildin Pottery Co.	174
Jewett, Z. K.	171	Wilks, S. Mfg. Co.	174
Joosten, C. H.	165	Wilson, Wm. C.	169
Karr, Geo. A.	165	Wichold, Geo.	172
King, James	167	Wolf, I. Mfg. Co.	168
Krick, W. C.	170	Wood, I. C. & Bro.	172
Lauborn, Lora J.	171	Young, T. B. & Co.	163
La Roche & Stahl	163	Zirngiebel, D.	171

MONTREAL.—The Montreal Herald devotes a column to a description of the florists' business in this city in its issue of Oct. 19.

WORCESTER, MASS.—A successful chrysanthemum show was held here Nov. 10 by the Horticultural Society. At the exhibition held Oct. 26 there was an excellent show of ferns, palms and the usual run of pot plants.

ADIANTUM FARLEYENSE.—In the Gardeners' Chronicle W. J. Birkenhead says in regard to Adiantum Farleyense: "I am persuaded that many fail to grow this plant successfully through the use of peat in the soil. I find that when well drained, and planted in good strong loam made open and porous by the addition of leaf mold and sand, and placed well up to the light in a warm house, it will grow luxuriantly and as easily as a great many other ferns."

## SOMETHING NEW

— IN —

## Heating Apparatus

FOR

## GREENHOUSES.

Send for Illustrated Catalogue.

J. D. CARMODY,  
EVANSVILLE, IND.

## ATOMIZER SPRINKLER

SELLS ON ITS

Own Merits.  
Spray appears  
like fog. Best  
sprinkler in the  
world. Sprinkle  
less so even. Ex-  
cellent for win-  
dow gardening,  
flowers & house  
plants. Moistens them as if by a fog. Inequaled for  
killing insects. Fills instantly! Its uses impos-  
sible to describe here. Enclose stamp for illus. pam-  
phlet and price to agents. Remember, no stamp, no  
attention. M. GOLDMAN, Patentee, Pittsfield, Mass.

## IMPROVED BOILERS

FOR HEATING

## GREENHOUSES

GRAPERIES, POULTRY-HOUSES, ETC.

ALSO FOR HEATING

WITH HOT WATER UNDER PRESSURE.

VENTILATING APPARATUS

For Raising Sashes in Greenhouses.

GALVANIZED SCREW EYES

And Wire for Trellis Work.

Send for Catalogue.

Thos. W. Weathered,  
46 & 48 MARION ST., N. Y.

Sectional View.

Mention American Florist.



## HEATING APPARATUS

FOR

## Greenhouses, Etc.

CAST IRON PIPE AND FITTINGS.

JOHN A. SCOLLAY,

74 &amp; 76 Myrtle Ave.,

Brooklyn, N. Y.



## Improved Hot Water Boilers

For Heating

Greenhouses, Graperies,

CONSERVATORIES, ETC.

ALSO

Cast Iron Pipe, Fittings, Valves and

all Material for Heating by

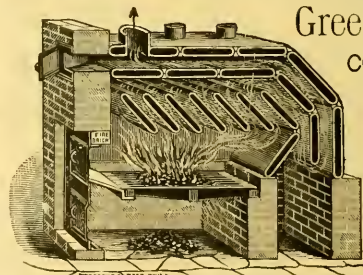
Hot Water.

Send for Catalogue.

MYERS &amp; CO.

1173 So. 9th St.,

PHILADELPHIA.



## GREENHOUSE HEATING

BY STEAM, BY HOT WATER, BY COMBINATION STEAM AND WATER.

EXETER MACHINE WORKS,

19 FEDERAL ST., BOSTON, MASS.

WORKS—EXETER, N. H.

THE CELEBRATED  
WILKS WATER HEATER!

For Heating

GREENHOUSES,

DWELLINGS,

POULTRY HOUSES,

STORES, BATH TUBS,

ETC., ETC.

Send for Price List.



S. Wilks Mfg. Co.,

Cor. Monroe &amp; Clinton Sts., Chicago.



J. M. GASSER'S

## PAT. ZINC JOINTS

For Butting Glass without Laps.

Makes it air and water tight. No breakage from  
frost. Saves fuel and glass. FLORISTS' WATCHMAN, for Flue and Hot  
Water, \$10.00; for Steam, \$2.00. It will ring a bell  
when the temperature changes, and ring when the  
steam goes down.

J. M. GASSER.

71 Euclid Avenue, CLEVELAND, OHIO.

Mention American Florist

# THE AMERICAN FLORIST



America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. III.

CHICAGO AND NEW YORK, DECEMBER 1, 1887.

No. 56.

## THE AMERICAN FLORIST

Copyright, 1887, by American Florist Company.  
Entered as Second-class Mail matter.

Published on the 1st and 15th of each month by

THE AMERICAN FLORIST COMPANY:

GENERAL OFFICES, 54 La Salle Street, Chicago.

EASTERN OFFICE,

Room 81, Vanderbilt Building, New York.

All communications should be addressed to the  
general office at Chicago.

SOCIETY OF AMERICAN FLORISTS.—E. G. Hill, Richmond, Ind., president; John N. May, Summit, N. J., vice-president; M. A. Hunt, Terre Haute, Ind., treasurer; Wm. J. Stewart, 67 Bromfield street, Boston, Mass., secretary. The fourth annual meeting at New York, Aug. 17, 18, 19, 1888.

WITH MUCH REGRET we make the sad announcement of the death at New York on Nov. 17, of Mr. James Reid, the well-known seedsman. A portrait will appear in our next issue.

ANOTHER HARVEST TIME is at hand for the live florist. Let the wise man secure his supply of all stock in demand for the next thirty days, and thereby obtain the wherewithal to settle accounts due and properly celebrate the holiday season.

CURRIE BROS.' FLOWER CODE reaches us. We regret very much to note that the code words for various shipping instructions adopted by the S. A. F. have been changed. We cannot see any gain, but rather prospect for greater confusion thereby.

### "Trees Boxed, Third Class."

In No. 55 you briefly tell a correspondent some of the many good things that the society has accomplished—all very true and convincing. Now allow me to urge concerted action to accomplish a reduction of express charges upon plants and cut flowers. The roots of the former are mostly enveloped in soil that adds to the weight, and the latter are often packed with ice; yet on the total weights we have to pay the very highest charges—not even getting the benefit of the hundred pound rates—but having each box charged up separately, although a number of them would come on the same train and from the same shipper.

The American Association of Nurserymen at their last convention appointed an energetic committee to interview the railroad officials with the object of securing a reduction of freight on trees, and the result is that instead of the old stereotyped "Trees and shrubbery boxed first-class, prepaid and guaranteed," we are to have as stated above "Trees boxed, third-class," so Mr. Emery, one of the committee, briefly writes me. Now let us go and do likewise.

ALEX. MURDOCH.

Pittsburg, Pa.

## Chrysanthemum Shows.

### Chrysanthemum Shows, 1887.

During the first two weeks in November shows were held in the following cities: Boston, Philadelphia, New York, Orange N. J., Chicago, Baltimore, Indianapolis, Hartford Conn., New Haven Conn., Springfield Mass., Youngstown O., Memphis Tenn., Syracuse N. Y., Nashville Tenn., San Francisco, St. Joseph Mo., Providence R. I., Woonsocket R. I., Worcester Mass., Easton Pa., and Columbus, O. In addition to these a large number of excellent displays have been made by individual florists all over the country. It would therefore seem that "the chrysanthemum craze" is gaining considerable strength rather than waning. The lavish notices these exhibitions have received from the local press everywhere have certainly been of immense benefit to the whole trade.

### Dates for Chrysanthemum Shows.

With one exception, all the chrysanthemum shows in the United States occurred the same week. This is unfortunate, because in cut flower classes where the distance between the cities holding shows is not too great, all good growers could compete and attend the shows in person, if the dates could be so arranged as not to clash.

I notice in the English horticultural journals that the dates of chrysanthemum shows there cover a period from Nov. 3 to Dec. 5, and there are more set down from Nov. 15 to 18 than there are from 8 to 11. Mr. Wm. K. Harris says that all the best varieties are in their prime from the 8th until the 12th of November. There must be some way of retarding chrysanthemums in Europe, or the cultivators select those varieties which are predisposed to bloom late, to prolong the exhibition season over a longer period than seems possible in this country. It would be a great accommodation to those actively engaged in the details of exhibiting or preparing for a show, to have them distributed through the first three weeks in November.

It will be well for all committees preparing schedules for next year to bear in mind that 1888 is the presidential election year, and if I am not in error the election is on the second Tuesday in November—just when the queen of autumn is in the zenith of her glory; and judging from past experience, a chrysanthemum show, no matter how meritorious it may be will be flat, stale and unprofitable if it happens during election week, especially if the contest is close and the result in doubt for several days, as it was in 1884.

This is an age of progress. Would it not be a greater test of skill for the suc-

cessful exhibitor to carry off the blue ribbon at a show in an off week, than when the flower is at its height? Growers and exhibitors should be consulted, as well as the committees on finance, before dates are fixed for next year's chrysanthemum shows.

Philadelphia. EDWIN LONSDALE.

### Notes on the New York Chrysanthemum Show.

BY WM. FALCONER.

The finest Japanese flower in the exhibition was J. Deleaux, dark velvety crimson, very full and double and seven inches across. Robert Bottomly with broad pure white petals was eight inches across and the largest flower in the hall. Other fine Japanese flowers were Mrs. Langtry, white, six and one-half inches; Baron de Prailly, rose-purple, seven inches; Mrs. Wheeler, nankeen, six inches; Mrs. Frank Thompson, pink and silver, seven inches; Criterion, amber, six and one-half inches; Fair Maid of Guernsey, white, six and one-half inches; also Lord Byron, Domination, Roseum superbum, Soleil Levant, Troubadour and Grandiflorum. Among the best of the Chinese sorts were Nil Desperandum, Princess Teck, John Bradley, Jean d'Arc, Lord Alcester, Cullingfordi, Alfred Salter, Lord Wolsley, Jardin des Plantes, Baron Beust, E. P. Wilbur and Salteri. Jean d'Arc was four inches across by three and one-half inches high in middle, and this was a good average of the best of them. Anemone and pompon flowers were limited in number and contained nothing of much merit.

Seedlings were not numerous represented nor did they contain anything very desirable. One raised by David Rose and named Geo. Pratt, the judges considered the best seedling in the show. It is after the fashion of Hon. J. Welsh but larger and not so bright. Julius Scharff showed several nice seedlings; conspicuous among them were C. I. Allen, Japanese, semi-double, sulphur-yellow, six inches across; Mrs. George J. Tyson, Japanese, full double, half inclined, large, rose-purple; and James G. Blaine, loosely incurved, bold, crimson-brown and gold.

The chrysanthemum bouquets were too stiff and the flowers in them too much packed together.

The baskets of chrysanthemums needed heavier dressing than light-fronded ferns. One basket was dressed with sprays of hemlock and Thunberg's spiræa. I use shoots of Berberis aquifolia (Mahonia aquifolia) for chrysanthemums, tritomas, white day-lilies, and other heavy flowers, and know of nothing better.

Corsage bouquets were made of roses or lily of the valley and violets. Now, if there is one thing more than another I like about a bouquet of any sort it is "finish." But when I find the stems of



a corsage bouquet tied around with cotton thread in a clumsy way, or all the prickles left on the rose stems, I don't think there is much "finish" about it.

A handsome Farleyense fern over four feet across was shown by John Dallas, Bridgeport, Conn. Mr. D. tells me that at last potting time instead of giving the plant a larger pot he merely reduced the ball by paring, and repotted into the same sized pot as the one in which it was growing before.

#### The Indianapolis Show.

The chrysanthemum show was a decided success from every point of view. There were many misgivings, even by the florists themselves, as to the probable outcome; but when the evening of the 8th arrived and the doubtful ones took a look around, it is stating it mild to say that even the most hopeful among us were agreeably surprised at the magnificent array of fine plants. The mayor of the city opened the show, expressing surprise and gratification at the splendid exhibit before him, assuring us that the only thing necessary to do in order to have a successful financial exhibit at the close, was to let the people of Indianapolis know the character and extent of the exhibit. This was somewhat difficult to do, although the papers gave us extended notices each day, but the public mind seemed centered on the anarchist proceedings at Chicago. President Carmody responded to the mayor's address of welcome in a pleasing manner, giving a few important facts in the history of the flower.

The best twenty-five plants were shown by Fred Dörner of Lafayette, who deservedly took first premium. The plants in this collection were nicely flowered and covered with fine, healthy foliage. Hill & Co. second, Bertermann Bros. third. The best specimen plant—first, Fred Dörner, with a magnificent Duchess; Hill & Co. second, with Cullingfordii; J. Larsen third, with James Y. Murckland. Best six whites—first, Fred Dörner; second, Weisharr & Lentz; third, A. Wiegand. Best six yellows—first, Weisharr & Lentz; these were a magnificent lot; second, Fred Dörner; third, A. Wiegand. Best six standard chrysanthemums—first, Fred Dörner; second, J. Larsen; third, Henry Hilker. Best twenty-four varieties cut blooms, one flower of each—first, J. A. Peterson of Cincinnati, O., with a grand collection of noted varieties. In this exhibit were the following sorts: Flandre Neige, pure white; M. Moussilac, reddish orange; Dr. Andignier, crimson; Mons. Vintresky, needle-like petals, creamy pink; Delicatum, anemone flowered, pink in color; Mr. F. Noyes, blood crimson; Rosebank, rosy crimson; Autumn pride, peculiar colored bronze; Robert Bottomly, pure white; and other good sorts. Second, Fred Dörner; third, Weisharr & Lentz. J. D. Carmody had a finely bloomed Mrs. Frank Thompson, which attracted general attention; also other choice sorts. Henry Hilker had some choice new sorts, notably Thibaut et Ketleir, a blood crimson; M. A. Vilmorin, a rich red pompon; M. Freeman, lilac pink; Koko, a beautiful anemone; J. Adalbert, lilac rose of fine form, and others.

To Bertermann Bros., F. Langstaff, Anthony Wiegand, Chas. Rieman, J. Larsen and Henry Hilker is due great credit for their magnificent groups of plants, which added greatly to the success of the show. Among the finer varieties exhibited may be mentioned Robert Crawford, Robert

Craig, Puritan, Source d'Or, Mrs. George Bullock, Mad. Paul Dutour, King of crimsons, Clara Harris, W. H. Elliot, Robert Bottomly, Moonlight, Flambeau, Toulouse, Mrs. Cleveland and others.

There were four entries for the John May prize for best design made of chrysanthemum flowers, and all were beautiful. A Wiegand secured the prize with an immense "Horn of Plenty," nicely worked; but many thought the entry of Miss Dörner—"Picture of Garfield's early home," a log cabin—was the best; it certainly exhibited rare artistic merit in its conception and execution, but the committee thought different from the general public. Carmody's butterfly was lifelike and perfect, with all the colors of a butterfly on it. The Wm. J. Stewart prize, for best bridal bouquet, was carried off by John Heintz of Terre Haute, as was the premium for best funeral designs; both pieces were handsomely worked out with choicest flowers. The J. D. Carmody prize was awarded to Henry Hilker for best table design. The J. C. Vaughan prize went to Julius Peterson for best exhibit of cut chrysanthemums. Other prizes were carried off by deserving exhibitors, but those mentioned above were the most prominent.

Peter Henderson sent a splendid collection of cut sprays of chrysanthemums, which were greatly admired. John Henderson's exhibit of rosebuds and chrysanthemums were a most noteworthy lot; among the roses were magnificent Petits, Gontiers, Sunsets, Perles, Mermets and others. B. A. Elliott of Pittsburg sent two dozen magnificent Puritan flowers, which were of great interest to rose connoisseurs. E. V. Hallock & Son sent their new carnations, E. G. Hill and W. W. Coles; such fine carnation blooms have rarely ever been seen. Another exhibit of carnations was made by W. P. Simmons & Co., of Geneva, O. This exhibit was composed of the firm's new seedlings which will shortly be offered for sale: Silver spray, an almost pure white, was the one of principal interest to the florists present, and it received critical examination at their hands. It was considered a variety of great merit, from its large size and perfect blooms. Another seedling—a soft, rosy pink—was deservedly a favorite. Siebrecht & Wadley sent a choice collection of cut orchid flowers, which were not only beautiful and interesting, but they helped very materially to attract the people.

Competition in roses was sharp, and many fine collections were entered. Henry Hilker first, Hill & Co. second, M. A. Hunt third. The last named exhibitor had by all odds the finest Benetts, Perles and Sunsets, but not having the requisite number of varieties, he was put at the foot of the list. H. Hilker carried the prize with fine clusters of M. Niel, which seem to carry weight with judges whenever shown. H. Graham of Terre Haute was too late to enter the lists, but his Catherine Mermets were declared the largest and best-colored of any buds ever exhibited of that variety.

The one person who contributed most to the success of the exhibition, and who gave his time and energies to make it a success, was the secretary, Wm. Bertermann. The members of the society appreciating this fact, presented him on Thursday evening of the show with a pearl-mounted pair of opera glasses. The president of the society made the presentation speech, which was accepted in a few fitting words by Mr. Bertermann.

The Indianapolis florists contributed

quantities of fine palms and other foliage plants, which were made into a pyramid in the center of the hall. In the arrangement of this group Edward Cornell deserved the credit of forming one of the most attractive features of the show.

J. J. Kellar, Joseph Hodges and Bro. Langstaff are indispensable on occasions of the kind. Anthony Wiegand as ticket seller is a great success. A look at his face was enough to tell how the receipts were; the first two days the agony depicted was terrible, but on the afternoon of the third day his face beamed like a Gloriosum chrysanthemum flower. For a start, we think the show was a great success. Francis Morat, Jacob Schultz and S. Thompson, of Louisville, Ky., were present. Geo. Heintz of Toledo, Roger Murphy of Urbana, J. Horlacker of Dayton, O., favored us with their presence. The show paid expenses and left between \$200 and \$300 in the treasury.

E. G. HILL.

#### The Baltimore Chrysanthemum Show.

As stated in last issue, this show was probably the best chrysanthemum show ever held by the society.

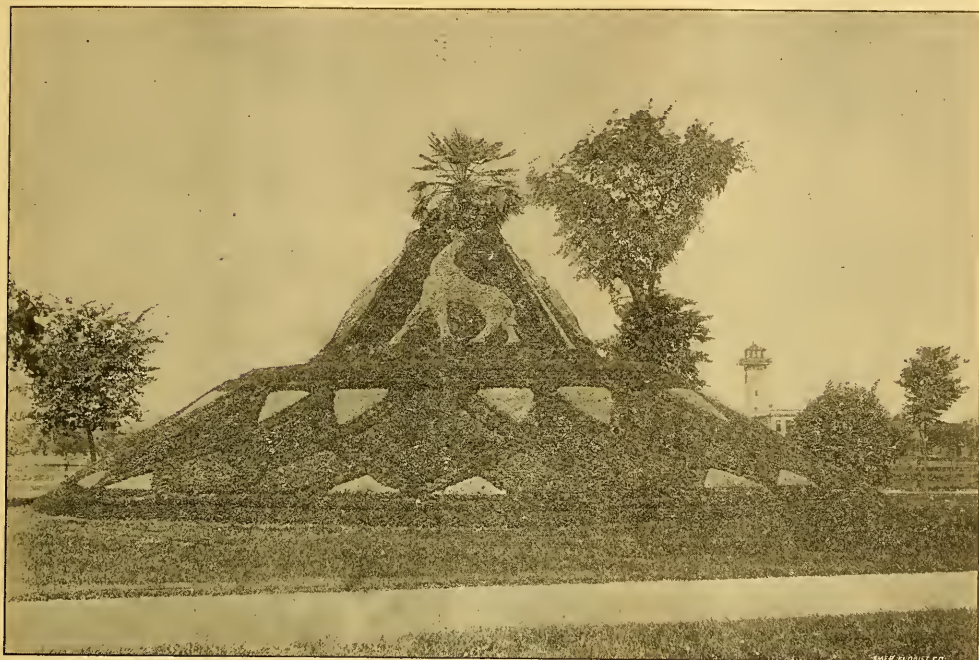
A new design was a beautiful floral pedestal by Messrs. Brackenridge & Co. The base was composed of a solid mass of ivy leaves with the corners of white chrysanthemums. On the four sides were a sickle, an anchor, a heart and a star of pink, red, yellow and purple chrysanthemums respectively. On the top was an urn of various colored chrysanthemums, with a yellow Maltese cross of the same flowers on each side, the whole surmounted by a white dove. It was much admired. The awards were as follows:

Twelve Chinese—first, Chas. Campbell, gardener to Gen. George S. Brown; second, James Pentland. Six Chinese—first, Edward Herrmann & Bro. Twelve Japanese—first, John Cook; second, Charles Campbell. Six Japanese—first, Edward Herrmann & Bro.; second, Mrs. August Hoen. Twelve pompons—James Pentland. Specimen Chinese, Japanese and pompon—all to Edward Herrmann & Bro. Display of fifty plants, not less than ten varieties—first, E. Holden, gardener to Robert Garrett; second, John Donn. Display of twenty-five plants, not less than ten sorts—first, John Cook; second, William Fowler. Group of stove and greenhouse plants—first, Hamilton Easter; second, James Pentland. Group of ornamental foliage plants—first, E. Hoen; second, Hamilton Easter. Group of palms—first, S. Feast & Sons. Group of exotic ferns—first, Hamilton Easter. General display of plants—Hamilton Easter. Twelve cut blooms, Chinese chrysanthemums, and twelve cut Japanese—first, John Donn; second, William Fowler. Twelve cut blooms, pompons—Wm. Fowler. Display of cut blooms, chrysanthemums—first, John Donn; second, William Fowler. General display of cut flowers—John Cook. Design of cut flowers—first, E. A. Holden; second, Miss Mary Patterson. Bouquet—first, E. A. Holden; second, Miss Mary Patterson. Basket of cut flowers—Miss Mary Patterson. Special prizes—best ten Chinese chrysanthemums and best ten Japanese, \$10 each, to E. Holden, gardener to Robert Garrett.

Special commendation—Frank Coral, gardener to Miss Mary Garrett, for cut chrysanthemums and other flowers not entered for competition; Brackenridge & Co., for design of pedestal and vase, and to Henry Bauer for carnations.

Amongst Mr. Cook's cut flowers were fine specimens of some of his seedling roses and some fine new violets, among them a sport from the double white and called "Robert Garrett"; it is a pale blue, large and fragrant. A. W. M.

NEW HAVEN, CONN.—At the chrysanthemum show over 1,000 plants were exhibited. Robt. Veitch & Son exhibited the largest collection. Excellent exhibits were also made by C. C. Munson, John H. Slocombe, Wm. Coulter, W. J. Rowe, F. C. Munson, Robert Paton, Joseph Millson, C. P. Auger, Archibald Veitch, and Geo. McKee.



THE MOUND, DREXEL BOULEVARD, CHICAGO; VIEW FROM THE EAST.

**SAN FRANCISCO.**—At the chrysanthemum show, John H. Sievers bore off first honors, he making a very handsome and large display of both plants and cut flowers. The others were divided between the exhibits from San Mateo and San Rafael. The show was a success financially as well as artistically.

**SYRACUSE, N. Y.**—At the chrysanthemum show held Nov. 9, first prize for best exhibit was awarded to Theo. Dissel. Handsome displays of chrysanthemums and decorative plants were made by Gen. D. P. Wood, Hamilton S. White, A. H. Davis, Yates Castle, P. R. Quinlan & Co., F. C. Dillaye and the State asylum. E. D. Wheadon of Skaneateles acted as judge.

**PROVIDENCE, R. I.**—The chrysanthemum show was undoubtedly the finest ever given by the R. I. Hort. society. Prominent exhibitors were Parquhar Macrae, Geo. Johnson, James Andrews, D. W. McCoid, Robt. Johnston, and C. F. Fairbrother, E. J. Callamore, R. J. Sullivan and Johnson Bros. The handsomest display was probably that of Geo. Johnson. He exhibited 200 plants in about fifty varieties all remarkably well grown, and many of them never before shown.

**HARTFORD, CONN.**—The recent chrysanthemum show was the best ever held here, the display far exceeding expectations. First prizes were awarded to Thos. Maltman, John Davie, B. Beemer, John O'Neil and Robert Patchet; second prizes to Geo. M. Atwood, Robert Patchet, B. Beemer, Wm. May and F. A. Boyle. S.

W. Robbins made a magnificent display, and those of Jas. R. Pitcher, Short Hills, N. J., and Edwin Fewkes & Son, Newton Highlands, Mass., were grand, but were not entered for competition.

**COLUMBUS, O.**—The first annual chrysanthemum show of the Columbus Hort. society was held Nov. 12. The exhibition was not large, but some choice specimens were shown. Ohio State University showed 180 varieties, but they were grown in too small pots. The finest specimen plants were shown by John Hellenthal. Miss McClelland showed the finest plants for cut flowers. Although but a small admission fee was charged, the show was not well attended.

W. S. DEVOL.

**SPRINGFIELD, MASS.**—The chrysanthemum show held Nov. 14-15 was the best ever seen here. First prizes were awarded to Dexter Snow, J. E. Taylor, Robert McCrone, John Wilkinson & son; second prizes to C. H. Dennison, Wm. Schlatter, R. Hale Smith and J. E. Taylor. Gratuities were voted to E. H. Atwood, Robinson Bros., E. W. Clarke & Son, J. Wilkinson & Son, C. F. Fairchild and the New York Floral Co. Beautiful displays were made by T. H. Spaulding, Orange, N. J.; E. Fewkes & Son, Newton Highlands, Mass., and E. A. Wood, West Newton, Mass. Mr. Spaulding's exhibit comprised sixty named varieties, most of them of immense size.

**CHRYSANTHEMUMS FOR SEED.**—At Childs' place, Hinsdale, N. Y., Nov. 18, three men were busy clipping short the

petals of the chrysanthemum flowers. This is considered necessary in order to set a good crop of seed.

#### Chicago Parks.

Our third view of the mound shows the giraffe. This side usually attracted the most attention from sight seers; the position of the figure with head raised as though about to browse on the palm just above its head was most natural and gave an artistic finish to this, not possessed by the others figures. The figure was of echeverias on a field of Sedum acre; the palm at top, *Chamærops filamentosa*. A diagram of the plants used in the lower portion was given in last issue. The side facing the west bore the figure of a harlequin, made of echeverias in same style as the others shown.

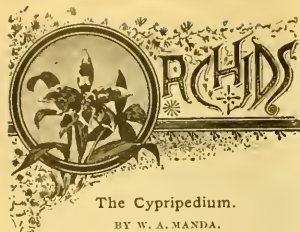
#### Florists' Club Wanted.

I am very anxious to see an horticultural society or florists' club in western Pennsylvania. If all who are in favor of such a society will advise me by mail, I will endeavor to make all necessary arrangements for a meeting for organization. I hope to hear from every florist in our district. Write today.

New Brighton, Pa. D. R. WOODS,  
V.-P. for Western Penn.

**SHORT HILLS, N. J.**—The chrysanthemum ball of the Short Hills club, at which the decorations were entirely of chrysanthemums, occurred Nov. 16. Immense quantities of plants and flowers were used in the decorations.





VII.

The nomenclature of this genus is very clear and simple, yet in cultivation we find many cypripeds wrongly named, or the specific name is omitted and only that of the variety used, which is very misleading in any case where there are a great many kinds to be considered. Not only in cultivation do we find these mistakes, but even several authors of books, not being thoroughly acquainted with this genus, have made serious errors. These are especially dangerous, as people searching for information are misled rather than correctly instructed. Amateurs who are forming collections have great trouble in getting some of the varieties true to name. Frequently after growing a tiny little plant which has been purchased for a large sum of money, for three or four years, it turns out to be quite a common kind, of which he already has a stock or does not want at all. Again, in some cases a rare and valuable plant turns out of a lot that has been purchased for a common species with a small outlay only. Several species have also synonyms, or a variety was considered as a species by some botanist, and later on when the name came to be changed, in a good many instances it would be grown under the old name.

The history of some species is also obscure or unreliable, owing sometimes to circumstances which, if they were known, would make quite a stir. The native country of all the species is known, but the exact locality only of the old kinds. If a new cypripid is discovered, we hear it comes from the East Indies, and we have to be satisfied with that. Nor can we blame much the discoverer of a new species for keeping secret the exact spot where it was found. The searching for new kinds and collecting is very expensive and dangerous business, and therefore when a man discovers a new species which has cost him a great deal of time, money and exposure to danger, he is justified in endeavoring to enjoy the benefits as well as the troubles, and in preventing, if possible, other men from reaping the harvest of his labor. As to hybrids, they are generally recorded, but where they are not the parents are easily found out by the appearance of the progeny. The varieties are the hardest to determine positively, especially when the flower has not its normal size and form, and where the matter of variation depends on a few spots or a slight shade of color. For instance, the old *C. insigne* is sold in twenty-two varieties, so the difference between this large number cannot be great. However, the connoisseur will not fail to see the variation when there is any worth considering.

## PLANTS IN FLOWER.

*Cypripedium Pitcherianum*, n. sp., Philippine Islands?—Roots thick, dark and downy; leaves acute, five inches long and two and one-half inches wide, coriaceous, green tessellated with irregu-

lar darker spots, smooth on both sides but slightly incised at the edges; scape over a foot high, purplish and downy; bract one inch long, green; ovary one and three-quarters inches long, green and grooved, remarkably bent downwards. The dorsal sepal is over two inches long and nearly two wide, acuminate, slightly revolute, whitish with bright green veins, and beset with very many black and dark purple spots, some running in lines, while others are scattered irregularly, covering nearly the whole sepal; the lower sepal is one and one-half inches long and three-quarters of an inch wide,

appearance, by which it is easily recognized. It is certainly one of the most beautiful of cypripeds, and flowering at this time of the year, it will be a welcome addition to the already many existing kinds. Unfortunately, this is an unique plant at present, I having received it among other plants coming from the East Indies. The plant is growing well in a warm house with plenty of light and moisture, potted in peat, sphagnum and potsherds. It gives me great pleasure to name this plant after James R. Pitcher, Esq., of Short Hills, N. J., who is a great lover of this genus and a happy owner of



CYPRIPEDIUM INSIGNE

whitish with broader green veins; petals deflected, two and one-half inches long by three-quarters of an inch wide, whitish, changing to purple toward the ends, and with several bright green veins running through; both edges are beset with black warts and hairs, while the inner part is covered with many large and smaller black spots; the lip is two inches long and uniformly seven-eighths of an inch broad, roundish, light purple with darker veins, and the under side is whitish green, while the inside is most beautifully studded with dark purple on a yellowish ground; the staminode is purplish, horseshoe-shaped with points incurved inside nearly touching each other, differing thus from the rest of the barbatum group, in which this plant may be classed.—*W. A. Manda.*

When I undertook to write up this class of plants I had no idea that when beginning to describe the different kinds I would have the fortune to describe a new one, and a beauty at that! The distinctive features of this plant are the upper sepal spotted and the curious ovary that bends downward, on which the flower is suspended, giving it thus quite a novel

one of the finest collections of this class of plants.

*Cypripedium insigne*, Wall. Nepal and Assam.—Roots thick, light-colored, downy; leaves six to twelve inches long by one inch broad, ligulate, uniformly of a light green color; scape eight inches high, blackish purple, downy; bract one and one-half inches long, green purplish at the base; ovary triangular, two inches long, slightly bent at the end; flower large, bold and showy; upper sepal two and one-half inches long by one and one-half broad, green, spotted with heavy brown spots, the end white and reflexed; lower sepal two inches long by one broad, light green with few light spots running in lines; lip two inches long and one inch wide at the broadest part, roundish, tawny yellow in color; petals two and one-half inches long and three-quarters of an inch broad, horizontal, undulated, yellowish green, shaded and veined with brown; staminode large, yellowish, broadly spatulate with a horn projecting in the middle. This is the second oldest tropical cypripid introduced into our culture, dating back as far as 1819, at which time it was discovered by Wallich in the



CYPRIPEDIUM PITCHERIANUM.

mountains of Sylhet, at an elevation of 6,000 feet, growing in moss among rocks. It is the commonest species in cultivation at present, being of the easiest culture possible; indeed, any one knowing how to grow the geranium can grow this plant. It does best potted in peat and moss and kept well watered during the period of its growth. This species delights in light and sunshine, which are necessary to produce a good crop of flowers. A temperature between 50° and 60° is sufficient for the well being of this plant, but a little cooler or warmer does not injure it in any way. It can be had in flower at any time from September till March, as it can be forced along or kept cool and retarded till spring. The flowers, which are produced very freely, last fully three months in full beauty, and several weeks when cut. This species varies greatly in the size and shape of the slipper, and especially in the coloring of the dorsal sepal, and the farther downward the white color descends in the sepals the more valuable is the variety.

*Cypripedium insigne*. Wall. Var. *Kimballianum*. Sander. Khasya.—Leaves same size as in type, darker; bract narrower and straighter; upper sepal two and three-quarters inches long and one and one-fourth broad, flat, reflexed at the top, bright yellowish green, the heavy dark spots running in lines into the white, which extend half way on the sides; lower sepal two and one-quarter inches long, narrow, light green, spotted, white at the end; lip two inches long and one and one-quarter broad at the widest part, from which it comes down nearly to a point, olive green in color; petals two and one-half inches long, reflexed at the ends, tawny yellow with darker lines; staminode flat, irregularly notched. This is a beautiful and distinct variety, having been discovered in the Khasya mountains by Mr. I. Forstermann, and named in compliment to W. S. Kimball, Esq., of Rochester, N. Y., a gentleman well known among the orchidists, and who has built up a wonderful collection of orchids in the last few years. The peculiarity of this variety is the narrow, flat and nearly straight sepal, and the slipper, which has the form of those fashionable shoes of nowadays (which are used for raising corns). The whole plant and flower is much darker than the type, and the sepals have more white than usual. It is a fine addition of last year, and flowering for the first time in this country. It needs the same treatment as the common type.

*Cypripedium insigne*. Wall. Var. *Nilssonii*, Hort. Khasya.—Leaves broader than the type; upper sepal two and one-half inches long by one and one-half broad; light green, with white and margin, spotted irregularly with brown spots; lower sepal one and one-half inches long by one wide, whitish green changing to white toward the end, lightly spotted; lip only one and three-quarters inches long and over an inch broad, roundish, olive green in color; petals and staminode as in the type. This variety is remarkable on account of its very short and round slipper, and the white margin that extends downwards, which makes it well worthy of a place in any select collection of cypripeds. Grows readily under same conditions as the type.

*Selenipedium longifolium*, Reich. f. Costa Rica. (Syn. *Cypripedium longifolium*. *Cypripedium Reichenbachianum*).—Roots thin, many and matted; leaves one to three feet long and one to one and a half inches broad, keeled, acute, dark green on the surface and



pale green underneath; scape two to five feet long, downy, branched and many flowered, dark green; bracts three inches long, light green; ovary one and three-quarters inches long, thin, brownish purple; upper sepal one and three-quarters inches long by three-quarters wide, green with darker veins and whitish margin; lower sepal one and three-quarters inches long by one and one-quarter broad, greenish, with white margin; petals horizontal, twice twisted, four and one-half inches long and only a quarter of an inch wide, green and white, while the extremities are purplish; lip two inches long and nearly uniformly three-quarters of an inch wide, green, shaded with brown and slightly spotted on the inside; staminode nearly oval, green, with black bristles on the top and side edges. This is a noble looking plant when well grown. Mr. Williams in his book says that there is only one flower open at a time, but I have before me a plant with thirteen spikes, all branched; the longest is five feet, with two branches, each bearing two flowers, while the main branch has three, making seven for one spike, and when grown in that way it is a species not to be despised. Of course the colors are not very striking, but the flowers are large, plenty of them, and it keeps flowering for ten months out of twelve. This species was originally discovered and introduced by Warszewicz in Costa Rica, and hence should be grown in a warm house, with plenty of light, sun and air. Being a free grower, it requires plenty of pot room and good turfy peat; this with some sphagnum moss are the right materials to grow this plant in.

*Selenipedium Sedeni*, Reich. f. x. (*S. Schlimi* x. *S. longifolium*.) (*Syn. Cyripedium Sedeni*.)—Roots thin, matted; leaves twelve to eighteen inches long and one and one-half inches broad, pointed and somewhat keeled, bright green; scape purplish, downy, one to two feet long, branched, many flowered; bracts short, green and purple; ovary narrow, two inches long; upper sepal one and one-half inches long by five-eighths broad, greenish white, shaded with purple; lower sepal one and one-quarter inches long and one inch broad, purplish; petals two inches long and half an inch broad, pointed, once twisted, purplish, much darker toward the acute ends; lip roundish, inflated, one and one-half inches long and nearly one inch broad, dark purple, shaded and veined with the darkest purple and spotted in the inside; staminode slightly reniform, purplish. This beautiful hybrid was raised by Mr. Seden (in whose honor it was named) for Messrs. Veitch & Son of London, England, and was the first hybrid of the *selenipedium* section. It is a good acquisition to our culture, being free growing and free flowering; indeed it is seldom out of flower when the plant is strong and well grown. Generally this plant is grown too warm, which is a great mistake; the intermediate house, with a temperature of 50° to 60°, is the most suitable for it, and the cooler it is grown the deeper will be the color of the flowers and richer the green of the leaves. Peat, sphagnum moss and a few potsherds are the best material for growing this plant; ample pot room and good drainage are also indispensable for its well being. It should be in every collection, however small.

Botanic Gardens, Cambridge, Mass.

#### Orchid Hints.

At this season of the year orchids should have little water; just enough to keep them from shriveling. Remove the shade from the glass, if it is not already done, so as to give the plants all the advantage of plenty of sun and air during bright weather, to ripen up the growths.

The winter flowering dendrobiums, such as noble and Wardenianum, as soon as they have finished their growth, should be put into a cool house—a carnation house will do first rate—and watered just enough to keep the bulbs plump until their buds are well advanced; when they may be removed to warmer quarters, and more water given to open the flowers; although the blooms will have more color if allowed to open in a cool house.

*Peristeria elata*—Doveflower—will have completed its growth on those plants which flowered in summer, and these should be kept moderately warm and little water given; if watered too much during their resting season, the bulbs will "spot" or perhaps rot altogether; the plants which flowered late should still be kept warm and watered, to enable them to finish up their growth as soon as possible.

*Calanthe Veitchi* and other deciduous sorts will now be doing growing and losing their leaves as they come into bloom; they should still receive a moderate supply of water to develop the flowers properly; after they are done flowering they should be set in a cool place and given very little water until they begin to grow in the spring. By keeping some of the plants in a cool place after the flower spikes are well advanced, a succession of graceful spikes of bloom may be had for cutting for a couple of months or more. The *Calanthe* is a most useful orchid, either in making arrangements wholly of orchid blooms or to use with other loose cut flowers.

*Odontoglossum Alexandræ* (crispum) and varieties will be showing flower spikes as they finish their growth, and a vigorous hunt for slugs and snails will be in order at night with the lantern. To prevent the pests from eating the tender spikes, the pots may be set on inverted flower pots placed in saucers to be kept filled with water, and a bit of cotton may be put around the bottom of the shoots, which prevents the slugs from crawling up. *Odontoglossum crispum* and *Od. Pescatorei*, which flowers later, need to be syringed freely at all seasons, and should have a plentiful supply of fresh air, even if a little fire heat has to be kept up to allow the ventilators being opened.

Malden, Mass.

BENJ. GREY.

#### Notes and Comments.

The Puritan seems to be something of a disappointment in the cut flower trade. It does not sell. The reason for its unsalability does not seem very clear, but the commission men cannot dispose of it readily, and do not look very favorably on the rose in consequence. No one finds fault with its creamy petals and fine foliage, but the shape is not admired, and the prices realized by it are unsatisfactory. Some of the critics find fault with the habit of the foliage, though it was specially recommended when it made its debut for the way in which the foliage grows clear up to the flower. But these upper leaves are awkward in shape, and the flower is very apt to be malformed. Perhaps we have not yet gained its confidence sufficiently to know how to grow it properly. One grower says it seems

likely to be more satisfactory when grown on rapidly with plenty of heat. This will certainly make it softer, but it may grow out of its objectionable habits. The first flowers shown of the Puritan were better specimens than most of those we see now.

Assuredly, we need force a rose for several seasons before we really know how to treat it. If we overwork it or otherwise abuse it, there is sure to be trouble. Undoubtedly the frequent failure of the sturdy *Perle* was due to overwork in some cases and over-feeding in others.

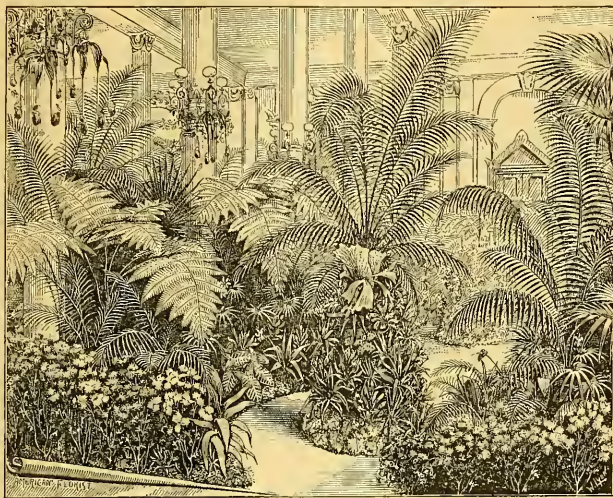
The New York Florists' Club has decided to admit ladies as members. At the last meeting Mr. May read a suggestive paper on the centralization of the cut flower trade, which was followed by a general discussion. The question of a flower market in New York has often been debated, but practical men find as many reasons against the project as in its favor. When the attempt was made, a few years ago, to establish such a market on Twenty-eighth street, it was soon abandoned as a failure; the buyers and sellers who were accustomed to go to the ferry continued to do so, and ignored the floricultural barn which was to be a trans-Atlantic Covent Garden. In any case, the American flower trade is so different in needs and methods from the same business abroad, that it would be impossible to follow foreign systems very closely. And we are likely to worry along in our present methods for some years to come, notwithstanding the example of Covent Garden. Some one is pretty sure to suggest the old reservoir on Forty-second street as a site for the flower market; that forlorn piece of architecture has been proposed as a site for almost every public building started in the last ten years.

What is the truth about chrysanthemums—as cut flowers, do they pay? Of course every grower must have them, but looking at their amazing cheapness, as they are sold on the street and everywhere else, one is forced to the conclusion that they must be grown in tremendous quantities to be at all remunerative. One grower says that a crop of Mrs. C. H. Wheeler paid better than the same area in roses. That recalls the remark of another grower, who said plaintively that he liked chrysanthemums, but he didn't like their effect on roses. Whether it is a waning craze or not, there is plenty of vitality in it yet, and the autumn flower trade without chrysanthemums would be Haulet with Henry Irving left out. And there is no doubt that the numerous shows help the retail plant trade. Every woman with a 16 x 20 garden decides that she is going to fill it with chrysanthemums or "artimishals," and she fully expects to produce a mass of such flowers as we see on disbudbed plants.

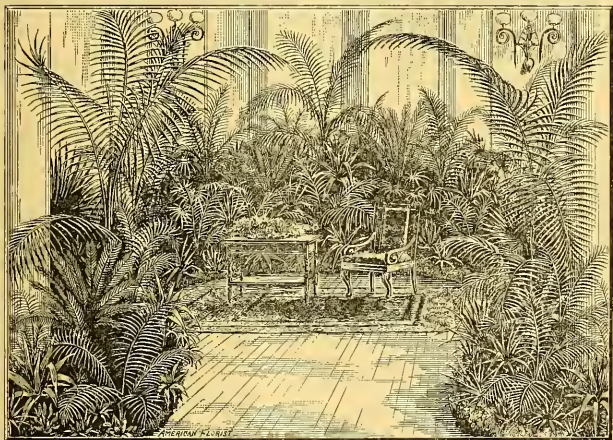
Speaking of flower shows, why can't we have a special class of exhibits, open only to employes of florists or growers, analogous to the premiums for gentlemen's gardeners only? Whether for plants or designs, there is little doubt that such a premium would call out competition. There are many ambitious workers who would come under this heading, and since the employes of to-day are likely to be the florists and growers of the future, anything that will arouse their interest and ambition is beneficial to the trade at large. No doubt the horticultural society would be perfectly willing to offer such a premium if some horticultural Samaritan will just step forward and present it.

MENDOTA, ILL.—Florist B. Moss was burned out Monday, Oct. 31. The loss was total.





SIEBRECHT &amp; WADLEY'S ENTRY.



JOHN FINN'S ENTRY, RECEIVED 1ST PRIZE.

PLANT DECORATIONS AT THE NEW YORK SHOW. NOV. 8-11.

Mr. Halliday's opinion of the Bride is confirmed by a majority of the growers in this section, and of course we have the advantage of familiarity with the Mermet, so that there is no question of its treatment. Among other varieties we are not so sure of, Mr. Taylor puts Mme. Cusin; he thinks that this rose will become more robust in every way as we gain knowledge of its requirements. Sunset is assuredly better now than when it first appeared.

What are we to do for rust on verbenas? Fir tree oil was at first supposed to be a panacea, but apparently it doesn't always get there. This disease appears to be an insect parasite rather than a fungoid one, and most likely anything that would kill

the insect would kill the plant too; that is usually the case. It sounds a little bit strange to be told that heat is something of a preventive, because we always used to consider that the verberna required cool temperature. But the extra heat makes the plant grow too rapidly to give the parasite much chance. Between rust and mildew, black spot and a varied assortment of insect plagues, the florists' lot is not always a happy one.

The death of Mr. James Reid, late of Peter Henderson & Co., which occurred on the 17th, will be a shock to many, though it was hardly unexpected. The trade loses a well-known member in Mr. Reid, and his death will be regretted by a large circle. EMILY LOUISE TAPLIN,

## Odds and Ends.

If this should meet the eye of any florist who doesn't grow Begonia Brantii, I would advise him to lay in a stock at once. To my mind it is the best of all the flowering begonias, its trusses of white flowers being very valuable for cut flower work. It is a good grower, a persistent bloomer, and if there is a spare corner near the glass where a few young plants can be permanently planted out, they will amply repay for the room they occupy.

Old things are constantly becoming new. In the florist trade every once in a while some plant that was old to our grandmothers is dragged from oblivion by some enterprising florist, and under a new name is submitted to a confiding public. The last thing thus reinstated is *Transcandia aquatica*, which, under the name of "Water smilax," is being vigorously boomed by one of our most enterprising dealers. It is really a good thing and is selling like the proverbial hot cake.

Another good thing—though by no means old—is *Thumbergia fragrans*. It is another of the things that everybody ought to grow. It is a rapid growing, handsome greenhouse climber. Its pure white flowers of substantial texture are exceedingly useful for funeral work.

During the past few years the exhibitions of the Maryland Hort. society have not been at all successful, many of the florists and gardeners in this vicinity appearing quite indifferent in the matter; in fact, were it not for a few zealous spirits who struggled along, ever hoping for better days to come, the society must have gone down long ago. Since the organization of the Baltimore Florist Club, however, a most remarkable improvement has taken place. At the exhibitions during the past year there has been but little vacant space, and at the annual exhibition last September and the late chrysanthemum show every available inch of space was occupied. The establishment of the club has unwrapped the cloak of selfishness with which some of us were "girt about"; dormant enthusiasm has been aroused, and above all, a feeling of professional pride has been engendered. I feel confident that within another year every florist and gardener in and around Baltimore will have become members of the club. Many held themselves aloof at first until assured that they would derive some pecuniary advantage from membership, but they are coming to realize that other things deserve consideration and are worth attaining apart from dollars and cents. They begin to feel that the advancement of trade interests and the profession generally require the higher intelligence and increased knowledge which the debates and social exchange of opinion at the Florist Club enables them to attain. An exhibition under the auspices of the club is being agitated. Should it take place, I can promise that it will be the finest affair of the kind ever held in the Monumental city.

E. S. H. (p. 141) will find that there is little gained by bothering about bulbs that have been forced. Bulbs are so cheap nowadays that it is really more economical to lay in a fresh stock each season. I generally take a few of the best of my old bulbs of hyacinths, tulips, etc., and plant them in some odd corner for sake of any bloom they may give for cutting; all the poorer bulbs I consign to the rubbish pile—their proper place.

R. J. Halliday has a variegated ageratum which he is nursing with parental



tenderness. It is a sport from "Mayflower"—a very dwarf bedding variety. The foliage is beautifully marked with creamy white, but in all other respects it resembles the original.

The exhibit of S. Feast & Son, owing to its arrangement, constituted a very attractive feature at the late chrysanthemum show. Vacant room in the body of the hall being at a premium, Mr. Feast concluded to utilize the space on the stage between the curtain and the footlights. Using the dark crimson drop-curtain as a background, he arranged a row of *Cocos plumosa* the entire width of the stage. Next came a line of *Eucharis amazonica* in boxes, and a perfect mass of bloom. A lot of *Farfugium grande* in 4-inch pots set closely together all along the edge of the stage, completed the arrangement. The effect was strikingly oriental, and was very much admired. Not a pot or box was visible; it was a lesson on effective arrangement by which some of us might profit. As Mr. Feast says: "It isn't what you do, boys; it's the way you do it."

I wish some one would give us a few points, gathered from actual experience, as to the Puritan and its value for forcing. I am not satisfied with it for my own part; the flowers have an ugly greenish tint and don't open well. It appears to have a peculiar attraction for black spot and mildew, so that altogether I am so far disappointed in it. Indeed, I would not take a dozen Puritans in exchange for one plant of Marie Guillot which I have growing in the same house, and from which I cut a lot of magnificent pure white roses every day in the year.

Baltimore, Md.

A. W. M.

#### Francoise Lacharme.

We have to record the death of this eminent French rosarian, which occurred Nov. 5, at Lyon, France. The deceased was born at St. Didier sur Charonne, Ain, France, Jan. 28, 1817, and was consequently 70 years of age at the time of his death. We are indebted to his friend, Jean Sisley of Monplaisir, Lyon, for the following sketch of his life: "His father was an agriculturist and desired his son to follow his profession, but the roses in his parent's garden had at an early age attracted his special attention, and at last he obtained consent to study horticulture, and in 1836 was placed as an apprentice with M. Poncet, at Lyon. He went to Paris in 1839 with an introduction from M. Plantier, the rosarian, to M. Pirolle, the founder of the Bon Jardinier, who obtained for him a situation in a Dutch horticultural establishment at Paris in the neighborhood of the palace of the Luxembourg, the gardens of which were then directed by Mr. Hardy, the well known amateur and lover of roses, and where young Lacharme went very frequently to admire and study them.

"In 1840 M. Plantier, wishing to retire, offered him his rose establishment at Lyon, which he accepted, and assisted by his counsels he began to sow roses, and soon obtained a then very remarkable variety, which he named hybrid remontant *Ernestine de Barante*, which he sent out in 1843, and since that time he has not ceased to sow roses very extensively, and has obtained a great number of splendid varieties which still ornament the collections of amateurs of all countries.

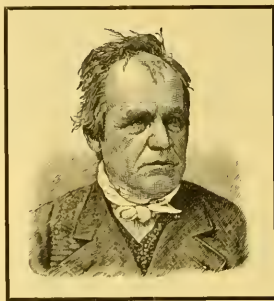
"Francois Lacharme was esteemed by all those who knew him, because he was a very laborious and intelligent man, and of the strictest honesty."

Lacharme has sent out some sixty or more new roses, most of which have been of merit, among which were Victor Verdier, Salet, Paconia, Anne de Diesbach, Charles Lefebvre, Mme. A. de Rougemont, Xavier Olibo, Alfred Colomb; Baronne de Maynard, Coquette des Alpes, Boule de Nieve, Louis van Houtte, Coquette des Blanches, Mme. Lacharme, Captain Christy, Hippolyte Janain, Countess of Serenye, Jean Souper, Mme. Lambert, Catherine Souper and Jules Fingier.

#### Notes on Louis Siebrecht's Place.

BY WM. FALCONER.

Louis Siebrecht's place is between Queens and East Hinsdale stations, Long Island. His attention is almost entirely devoted to growing cut flowers for the New York wholesale trade. He also



FRANCOIS LACHARME.

grows gladioluses and tuberose in summer. He confines himself to a few things but these he handles first rate; in fact we look upon Louis Siebrecht as one of the neatest and most successful florists around New York. He used to be one of our largest and best violet growers, but a couple of years ago the disease struck his plants, and now he has entirely discontinued growing them. In the line of roses he confines himself to two houses of Jacqueminots. These are still open. Apart from carnations Mr. S. prefers growing his plants in pots in summer. He plunges the pots out of doors and to about three-fourths their depth, in rows, and all near together where they can be constantly under the eye. He dislikes plunging to the brim, as he finds the roots often get injured. The pots are only watered a few times during the summer, but every little while all are gone over and turned round about to break off any roots that may have grown out through the bottom of the pots. The great hurry comes on in August and September when bringing inside, transplanting from pots to benches, and potting of bulbs takes place.

CARNATIONS.—Of *Glowing Coal*, *Hinze's White*, *Black Knight* and *Frederick Johnson*, some 20,000 plants in all are grown. *Glowing Coal* is a seedling from *Portia*, as good a scarlet, a larger flower and very profuse; *Hinze's* is the best white he has tried; *Black Knight* although a little wiry-looking in fall, becomes quite strong as the days lengthen; and *Frederick Johnson* for quantity and quality of flowers has no equal in its class. Mr. S. particularly dwells on the long-lasting in full beauty qualities of these varieties after they have been cut. They

neither change color nor fade so soon as do the general run of other carnations. They are all planted out on benches in beds of earth four inches deep, and with one stick to each plant. Raised from cuttings in early spring, planted out in summer, and in the greenhouse in August or early September. A few other kinds occupy a bench by themselves; they are on probation. Among them are *Snowdon*, *Sunrise*, *Columbia*, *Quaker City* and *Buttercup*. In raising his young stock, he puts his cuttings into the bench in the ordinary way, when rooted pots them, and transplants from pots to the open ground. Many growers consider this potting superfluous, and instead box off, but Mr. S. is satisfied that he gets better results and with barely any losses from potted young stock. For cut flowers nowadays carnations must have long stems; in the market he gets only one-third the price for short stemmed carnations that he gets for long stemmed ones.

BOUVARDIAS.—These are young plants. He never keeps old stock. He grows them in pots all summer, and in August or early September plants them out on benches as he would carnations, some eight by ten inches apart, and with a stick to each plant. The varieties are *Davidsoni*, *Alfred Neuner* and *Elegans*. He raises them from root-cuttings. Cuts the roots into small pieces, sows these in a thin bed of sand in the propagating house bench, over them a little more sand, then lays some bars across the bench as a support to some panes of glass. Don't let drip get at them nor sunshine. That *Alfred Neuner* will not come true from root cuttings is all nonsense; he propagates it in no other way and has never found it to revert to the single form.

CHRYSANTHEMUMS.—He grows an immense number of two varieties, namely, *Diana*, a Chinese, incurved, beautiful, white flowering variety, and which now (Nov. 18) is almost entirely cut; and *Mrs. Hallock*, a large, flat-flowered, white Chinese sort only now approaching its best. Some other varieties are on probation. Single flowers are not popular. He raises his stock from cuttings in spring and grows them along all summer in 6-inch or 7-inch pots which he plunges in rows out of doors. When he has time in August he transfers them from pots to benches of earth indoors in cool houses; also at the same time plants a bed of them alongside in front of his *Jacqueminot* rose house, and sets up over it a temporary glass house made of the sashes which have been removed from the "Jack" house in the summer and which shall not be needed for some weeks to come.

CALLAS are all grown in 7-inch pots, one good bulb to each pot. They begin to come into bloom in September and continue in good flower till the following June. They are then turned out of doors and the pots laid on their sides. After six weeks' rest they are shaken out, repotted, set up and watered, and afterwards growth encouraged. Mr. Siebrecht dislikes planting out in summer. By it we get large masses of foliage but few flowers before New Year's. Planting out in beds in the greenhouse has also a tendency to luxuriance of foliage rather than a multiplicity of flowers.

POINSETTIAS look splendid. Some old plants are crowded at the end where they have head room, and the side benches are filled with young stock. They were grown in 6-inch pots and plunged out of doors in summer. Early in August they were brought into the greenhouse, turned



PYRAMIDAL ASTER HARLEQUIN

out of their pots and planted thickly on the benches. When they had grown high enough almost to touch the glass they were tied down so as to overlap each other shingle-fashion. If tied down at planting time they would require a second tying down before blooming time.

STEVIAS are in full bloom and others coming in. The dwarf variety only is used. He used to, but would not now grow the tall one. They are all young plants, from cuttings last spring, now in 6-inch pots, and have been grown in these pots all summer.

HELIOTROPES are all one year old plants—raised from cuttings last spring—and exclusively grown as standards in 6-inch pots. The plants have a clean stem of some sixteen to eighteen inches, and then branch out into a head. One stake to each plant. *Roi des Noirs* is magnificent, with immense heads of flowers, lots of leaves seven inches long, and without a trace of rust. Over-watering or drip upon the plants is very injurious.

ROSE GERANIUMS.—Young plants are planted out on a bench in a carnation house, for their foliage.

CAMELLIAS.—Some large white-flowered plants planted out in a greenhouse are yielding flowers freely. Before New Year's the flowers fetch ten cents each; after the holidays there is no demand for them.

SMILAX AND SALT.—Cut-worms have in recent years been rather destructive on this crop. With the view of destroying these pests and other larvæ that

might be in the beds, Mr. S. experimented on one bed by giving it a dressing of salt. The salt destroyed the smilax. In preparing his "Jacks" for starting he always gives the bed a dressing of salt, and without ever perceiving any evil effect upon the plants or roses. But it destroyed many of the rose grubs.

THE BULB SHED is a span-roofed wooden structure, seventy-seven feet long by twelve feet wide and lighted from the top by one or two sash windows. It has been built against the north side of the potting sheds and opens into them. It is arranged with shelves on each side on which to stand pots and boxes, and the floor, except the pathway in the middle, is also covered with boxes and pots containing bulbs. From here the bulbs are transferred to the forcing houses without any trouble, and the old-time laborious way of keeping the bulbs out of doors under a mulching, digging them out and fetching them in no matter what the weather might be, is done away with.

OF TULIPS, some 50,000 are grown in pots or boxes. Single varieties are confined to *Scarlet Duc van Thol*, *Yellow Prince*, *La Reine*, *Keizer Kroon*, *Rose Grisédin*, and *Coleur Cardinal*. They are planted as soon as possible after being received from Holland and set out of doors with one to two inches deep of earth over the tops of the pots or boxes. Brought into the shed in November. *Duc van Thol* only is brought into heat before New Year's. From the time it is brought from the shed into the greenhouse till

flowers are expected is some five weeks. *Coleur Cardinal* is the latest and should not be started early or hurried up. The only doubles grown are *Rex Rubrorum*, *La Candeur* and *Yellow Rose*, and these come in after the singles. Besides these indoor tulips a large number of gesnerians and parrot tulips are planted in a bed along the north side of the wall of a building. It is intended to retard the flowering time of these as much as possible so as to have them in bloom for Decoration day.

ROMAN HYACINTHS are had in batches from the 1st of November. Pretty well advanced in the shed, they are brought into the greenhouse and set on boards placed over the pipes at the ends of the houses where the pipes are a long way below the benches. When they have shown their flowers pretty well they are set up upon the benches.

PAPER WHITE NARCISSUS are in bloom from the middle of November, and are treated somewhat after the fashion of Roman hyacinths, only as they show so much foliage they must get to the light sooner.

POET'S NARCISSUS.—An immense number are grown in pots. The common, also the early-flowering (*ornatus*) one. The early one comes into flower about eight days ahead of the other, but considering the very much higher price of the bulbs, he is not sure that there is any profit in it over the old sort. They should not be hurried up.

ORNITHOGALUM ARABICUM.—By way of experiment he is this year trying 2,500 of these. Some are in pots and some planted out on benches. It usually blooms in February to April, and has large umbel-like heads of white flowers with dark centers.

LILIES.—He has 1,000 *L. candidum* in 10-inch pots; three bulbs in a pot. *Of L. Harris*, 200, one bulb in a 6-inch pot; and of *L. longiflorum*, 700, one bulb in a 4-inch pot. Of these last he has some home grown stock and some imported; the home grown looks better than the other. The strongest and most advanced are now being reotted into larger pots. Glencoe, N. Y., Nov. 18.

#### Pyramidal Aster, Harlequin.

Of the many kinds of the China aster grown at the Royal Hort. society's gardens, Chiswick, the above named sort proved of superior merit and a real gem in its way. It belongs to the pyramidal dwarf section of the many garden forms of *Calistephus chinensis*, and is in reality not an aster at all in the true sense of the term. The stems grow to the height of twelve to eighteen inches, and branching freely in the form of a pyramid, become covered all over with a mass of bloom. The strain was a mixed one, showing a ground color ranging through various tints of blue, purple and rose. Harlequin, as our illustration shows, has some of the florets marked or splashed with white, which gives the flower-heads a lively appearance. The engraving represents the flower-heads of the natural size, showing them to belong to the pompon race. The plants are of compact habit, and their free-flowering nature renders them very pretty and attractive to lovers of this class of garden plants.—*Garden- ing World*.

MAD. GABRIELLE LUIZET.—This rose is largely forced by a Philadelphia grower who considers it a very valuable variety for winter flowers.



Daily Record of Work Done at the  
Lincoln Park Greenhouses,  
Chicago, 1886.

Dec. 1.—Tem., morning 15°, noon 12°, evening 7°. Wind WNW. Continued repotting colens. Nipped young *Alternanthera* par. major.

2.—Tem. 5, 12, 10. NW. Same as yesterday, and repotted balance of primulas into 4-inch pots.

3.—Tem. 0, 18, 15. NW. Potted rooted cuttings of Mt. of Snow geraniums. Continued nipping and trimming *Alternanthera* par. major.

4.—Tem. 20, 23, 22. NW. Finished potting cuttings of Mt. of Snow geraniums. Commenced potting rooted cuttings of *Alternanthera aurea* into rose pots, placing three cuttings in a pot. Continued nipping young plants *Alter. par. major*.

5.—Tem. 7, 20, 20. NW. to SW. Sunday.

6.—Tem. 19, 30, 31. NW. to SW. Continued potting rooted cuttings of *Alter. aurea*. Cleaned vincas in No. 7 and plants in No. 1. Continued nipping *Alter. par. major*.

7.—Tem. 23, 33, 34. SW. Same as yesterday.

8.—Tem. 22, 43, 33. S. Finished potting *Alter. aurea*, and divided and potted a lot of plants which had become of good size; have now 4,000 pots holding 12,000 plants. Trimmed *Alternanthera versicolor* in No. 3.

9.—Tem. 28, 45, 47. S. Potted rooted *matricarias*, two in a 2½-inch pot. Potted rooted *Begonia semperflorens rosea* into thumb pots and *Panicum variegatum* three in a 2½-inch pot. Commenced potting rooted cuttings of *Alternanthera amena*, four in a 2½-inch pot. Trimmed *alternantheras* and cleaned *caladiums* in No. 3.

10.—Tem. 38, 44, 43. SW. Finished potting *Alter. amena* and trimming *alternantheras* in No. 3. Cleaned *caladiums*, vincas and other plants.

11.—Tem. 39, 55, 50. S. Repotted young roses. Repotted *Achyranthes aurea* into 3-inch pots. Thinned foliage of young geraniums in No. 4.

12.—Tem. 44, 48, 50. S. Sunday.

13.—Tem. 34, 34, 34. NW. Commenced propagating *Achyranthes Lindenii*. Cleaned cannas and other plants.

14.—Tem. 30, 38, 33. SW. to N. Same as yesterday, and continued thinning foliage of young geraniums.

15.—Tem. 5, 14, 10. NW. Finished propagating *Achyranthes Lindenii*, and commenced propagating *Achyranthes metallica*. Spread and cleaned *Cineraria hybrida*. Continued thinning foliage of young geraniums.

#### Seed Novelties.

We give illustrations of three of the novelties for 1888 introduced by Messrs. Haage & Schmidt, Erfurt, Germany. The introducers' descriptions we give below:

"Triumph aster, deepscarlet. This novelty is undoubtedly the most beautiful and most perfect of all dwarf asters, not only concerning the habit of the plants but also relative to the form and beauty of the flowers. It forms an entirely new class, reproducing itself true from seed and attains a height of but seven to eight inches. At the time when it shows its buds it resembles in habit somewhat the dwarf chrysanthemum aster, but in developing its large, handsome and beautifully shaped flowers it assumes quite another aspect. The flowers bend, on



TRIUMPH ASTER



BRIZA ROTUNDATA



STATICE SUPERBA

account of their weight, a little at varying angles, but do not droop so as to impair their beauty, each plant forming an elegant bouquet of itself, as may be seen by the annexed illustration which is accurately engraved from a painting we had made of a medium sized plant. The individual flowers measure from two and one-half to three inches across and are of the most faultless peony-form, all petals being beautifully incurved. The color is peculiarly rich and brilliant, when beginning to bloom it is a pure scarlet, but when in full bloom it changes to a magnificent satiny deep scarlet, presenting thus with these two brilliant colors a lovely sight. It produces its flowers in great abundance, each plant bears at least thirty to forty flowers of exquisite beauty. This novelty, while it was in full bloom, attracted the attention of all visitors to our gardens and was pronounced by all to be the most perfect and most charming of all dwarf asters cultivated up to this day. As it does not produce a single tall plant, it is well adapted

for borders, groups, carpet-bedding or for pot culture.

"*Briza rotundata*, Steud. Exceedingly graceful annual species, differing from all existing sorts of briza by its erect flower spikes and being therefore a splendid acquisition to the collection of ornamental grasses used in the arrangement of winter bouquets. When fully developed it attains a height of about two feet, the individual flower spikes are three and one-half to four and one-half inches in length and are borne on long and firm stalks; the size of a single spikelet is about the same as that of *B. media* or *B. geniculata*. Very attractive and extremely useful either in a dried or green state.

"*Statice superba*, Rgl. The *St. Suworowi* which we introduced in 1884 has gained many friends and we are justified in regarding this new species as one of the most remarkable of this interesting genus. As the annexed illustration shows, it differs conspicuously from the candelabra-shaped *St. Suworowi* by forming feathery

ed or plumed flower spikes similar to the feathered cockscombs. It grows to a height of from eighteen to twenty-four inches, each plant producing a large number of beautiful spikes or plumes and each of these spikes is composed of from sixty to eighty smaller plumes of which the lower ones are about three to four inches long, while the upper ones hardly attain a length of a half an inch. The main flower stem rises six to eight inches above the plume. When the plants begin to bloom they resemble closely a handsome flowering heath. The individual flowers are somewhat smaller than those of St. Suworowi and vary in all shades of colors from pure white to deep rose; the foliage is deeply cut like that of St. spicata."



American Beauty.

We some time since wrote our valued correspondent, Jean Sisley, Monplaisir, Lyon, France, for his opinion as to the identity of the roses Am. Beauty and Mad. Ferd. Jamain, and in reply have received the following:

"I received yesterday your letter of 27th September. Not being able to answer myself your question about American Beauty, and on account of my old age (84) not being able to go far, I sent my son to two of our best rosarians, who came to me—J. M. Gonod and Bounaire. They both said that for them, what they have received as American Beauty and possessed as Madame Ferdinand Jamain, they are the same variety; and as to your remark that the latter was a weak grower, they said that that must be occasional, either by the influence of the soil, situation, or perhaps the stock on which it is grafted, but that with them they are equally stout growers. Of course this does not mean that the party who sent out American Beauty deceived the public, because he may be mistaken, thinking that he was propagating a seedling of his."

**NEW ROSES IN 1887.**—In commenting upon the newer roses, under above heading, in the *Gardeners' Chronicle* of Oct. 22, "Wild Rose" describes Earl of Dufferin, Sir Rowland Hill and The Bride as of undoubted value; Her Majesty as a coarse rose, more like Her Majesty of 1837 than of 1837, and whose claims to be perpetual are very doubtful; and Marshall P. Wilder as a "Yankee wooden utmeg." Of American Beauty he says: "If all the beauties of America were like this, they would not be quite so much the rage as they are; it is dull in color, and is, moreover, an exact reproduction of a hybrid perpetual rose raised by Jamain, but excised from our catalogues long ago"; while Clara Cochet "has not warranted the high praises which have been bestowed upon it." Of Puritan, Grand Mogul, Claudius Levet, Souv. de Gabriel Drevet, Comtesse de Frigneuse and Miss Ethel Brownlow a description is given but no positive opinion as to their merits is expressed. Victor Hugo (Schwartz) he

describes as "a bright Xavier Olibo style of flower, very likely to be a valuable addition." From the great popularity to which American Beauty has attained here, and the poor opinion of it on the other side, it is evident that the American grower cannot be guided by opinions of new roses from growers across the Atlantic, but must work out the problem here for himself. The conditions under which we labor are so different that an identical opinion of European and American growers on the merits of a new rose cannot always be expected.

**CARNATION STARLIGHT.**—Geo. Hancock, Grand Haven, Mich., sends us a few blooms of a seedling which he has named as above. The flowers are of good form and on long stems. The color is a very light shade of yellow.

#### SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order.

**SITUATION WANTED.**—As foreman in commercial place; thoroughly understand rose growing, propagating and shipping. Married, one child. Address M. care American Florist, Chicago.

**WANTED.**—To see the "big drop" in flower pots. Read "ad" of SYRACUSE POTTERY.

**WANTED.**—An assistant in general greenhouse business; a young German preferred. State wages in person or by letter, Jno. D. IMLAY, Zanesville, O.

**WANTED.**—To hire a greenhouse man, one who understands packing single man preferred. Address GEO. THOMPSON & SONS, Louisville, Ky.

**WANTED.**—A first-class rose grower; none but one that understands that thoroughly. State wages. Address P. O. box 12, Alameda, Alameda Co., Cal.

**WANTED TO RENT.**—Three to six greenhouses; must be in good repair, and west of Chicago; or would take a working interest. Address with particulars O. care American Florist, Chicago.

**FOR SALE.**—Established greenhouse business central location, in good town Northern Indiana. 3,000 feet of glass, ample ground for improvements. Terms easy. Address W. W., care Am. Florist.

**FOR SALE.**—The best retail and wholesale florist and seedsman's business in the Northwest (population 150,000). Reason for selling, with full particulars furnished on application. Address BATA, care American Florist, Chicago.

**ANDREAS EITEL, FLORIST,**  
From FREDINGEN, formerly in Philadelphia, is wanted in inheritance matter. Send address to:  
**ELWERT & WENIGER,**  
484 N. 3rd Street, PHILADELPHIA.

**A. C. TUCKER,**  
Rose Grower,  
P. O. Box 190. NYACK, N. Y.

Orders are solicited NOW for Spring delivery for the following plants, in any size pots and in any quantity:

PERLE DES JARDIN, NIPHETOS,  
BON SILENE, LA FRANCE,  
SOUVENIR D'UN AMI, C. MERMET,  
AMERICAN BEAUTY, BRIDE,  
PAPA GONTIER, PURITAN.

Special discount given on all orders received up to Feb. 15th, 1888. Send for circular giving prices and terms.

**A. C. TUCKER.**  
Mention American Florist.

## ROSES AT YOUR PRICE.

We have a surplus of extra fine two year field grown plants of that best of all hardy white roses Madame Plantier, that we will sell by auction to the highest bidders. Sale on Dec. 10th. Send bids by mail, stating how many you wish and naming a limit, beyond which you do not wish us to bid.

**D. R. WOODS & CO.,**  
NEW BRIGHTON, PA.

## OUR SPECIALTIES.

## NOVELTIES IN ROSES AND OTHER PLANTS.

— ALSO —

### FLORISTS' STOCK FOR FORCING.

## HILL & CO., RICHMOND, IND.

### NOVELTIES IN ROSES.

Also the leading forcing varieties Teas, H. Teas and H. Perpetuals. 1,000 large roses in 6 and 7-inch pots; C. Mermet, La France, Sunset, Perles and Bon Silene, at \$25.00 per 100. Chrysanthemums, best varieties, 5 and 6-inch pots, \$15.00 to \$30.00 per 100. Bouvardias, 2 1/2-inch pots, \$5.00 per 100. Gardenia Radicans, at \$5.00 per 100. Grand Duke Jasmin, at \$5.00 to \$8.00 per 100. 3,000 American Holly, 1 1/2 inch open, at \$10.00 to \$12.00 per 100. Choicest buds and cut flowers at lowest market prices.

**JACOB SCHULZ, LOUISVILLE, KY.**

## IMPORTED H. P. ROSES.

Worked low on the Manetta Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagation quickly. Fine plants for sale by the 100 or 1,000, at low rates.

Address

**WILLIAM H. SPOONER,**

JAMAICA PLAIN, (Boston), MASS.

**Budded Roses for Winter Forcing or Spring Market Sales—H. P. and Teas.**

#### SPECIAL OFFER:

The following varieties, equal quantities of each, we sell for \$10.00 per 100:

H. P.—Aurora de Dieuch, La France, Gen'l Jacqueminot, Paul Neyron, Queen of Queens, Comtesse of Oxford, Jules Margutte, Auna Alexien, Mme. Gabriel Luizet, Mme. Knorr, Marie Benamar, Gloire Lyonnaise, Her Majesty, M. de Lyon, Alfred Colomb. The following Tea Roses at \$12.00 per 100: Perle des Jardins, Mme. Lambray, Marie Van Houtte, Mme. Balet, Mme. Charles, Mlle. Franziska Krueger, Duchess Mathilde, Cornish Cook.

Catalogue on application. Dormant buds of the new H. P's of 1887—Earl of Dufferin, dark, nearly black; Lady Helene, Stewart, red. The new Tea Rose Miss Ethel Brownlow, similar to C. Mermet, very free flowering. All at \$10.00 each.

Cyclamen persicum. Fine plants in buds which will flower in November, \$1.00 each. American Beauty, Bennett, Papa Gontier, Niphetos in 6-inch pots, 50c. each. SCHULTZ'S FLOWERS.

P. O. Box 78, COLLEGE POINT, LONG ISLAND, N. Y.

## E. BENARD,

ORLEANS, FRANCE.

**ROSES ON THEIR OWN ROOTS  
A SPECIALTY.**

**NURSERY STOCK OF ALL DESCRIPTIONS.**

For particulars apply to

**E. BENARD, JR., NILES, CAL.**

## ROSES FROM OPEN GROUND.

A few thousand strong, healthy plants, mostly TEAS, Hybrids, Baroness de Rothschild, Merveille de Lyon, Paul Neyron, Jacqueminot, Giant of Battles.

**EDWARD WACHENDORFF,**

ATLANTA, GA.

## BOUND VOLUMES OF THE AMERICAN FLORIST

VOLUME II.

Handsomely bound in cloth with leather back and corners, and title lettered on back in gilt, may now be had from this office.

Price, \$2.25.

**AMERICAN FLORIST CO.,**

54 LA SALLE ST., CHICAGO.



## On the Flower Trade.

### December Floral Styles.

BY OUR NEW YORK CORRESPONDENT.

Jasmine, heath Duc van Thol tulips, narcissus, and Jacqueminot and Diesbach roses are the novelties woven into the floral tapestry which is now the most fashionable covering for tables where banquets take place. A dinner given to fifty guests at Delmonico's was a beautiful exposition of this style of arrangement. The cloth was a pale amaranth silk, and over this in formal patterns were traceries of roses, the colors of these being exquisitely shaded, and all working up to a center of ferns. A band of roses all around the table finished the embellishment. This band included all the yellow-tinted buds, such as Perles, Safrano, Frigieuse, Capucins and Marechal Niel, the latter finishing the edges with *Asparagus plumosa* sprays.

Fern centers are the rule, these being composed of a splendid variety of adiantums, shaded with marvelous effect. Frequently these fern circles are flecked with orchids; in that case the foliage used is *Adiantum cuneatum* solely. A considerable number of table decorations are made where silver dishes are used to hold the flowers. These have a rich and solid appearance, but are old style. A unique arrangement for a dinner was a fern and orchid center piece, over which was suspended a large globe of violets. This globe was made up in clusters, which were the favors for ladies.

White willow and enameled basket work are favorite. The French fern basket is quite as popular as the French fish basket, which has entirely disappeared. When filled effectively the fern basket is all ferns inside, with only a high cluster of roses of one color and its shadings. The handle is garlanded with the same color of roses, which must be laid back; not any of them laid forward. On one side the garlands meet, when a loop knot is made by tying on the ribbon, then at about four inches tying again, arranging the loop so that some of the flowers in the cluster inside must be drawn through this loop; then loop ends are made, which fall low.

Room decorations are more elaborate than ever before seen. Delmonico's saloon was decorated for a wedding this week, where all the windows had curtains of *Lygodium scandens* and lambrequins of American Beauty roses. The lambrequins were fringed with lily of the valley. The mirrors, which are very large, were traced with fronds of ferns applied in fanciful patterns. The spaces between the windows and mirrors were ornamented with garlands to form a frieze, and below this a plaque of selected chrysanthemums was made up so that it had the same whorl as seen in the regulation Fourth of July pin-wheel. This style of plaque is very beautiful, and displays the flowers finely. The wedding canopy was brought out from one side. It was composed entirely of Bride roses, and was elegantly fringed with Roman hyacinths. The bridal gown was trimmed with a band seven inches in width of lilies of the valley, which was placed around the skirt and train just above the edge. It ran up the skirt at the left side, where a sash and cluster of orange blossoms fastened it. White satin covers for prayer books are trimmed or rather studded thickly with white flowers, double bouvardia being very suitable for this. This

floral binding ties with narrow ribbon. It is very fashionable for brides to carry prayer books, if married in Episcopalian or Catholic churches. But the bouquet is not omitted. These are even larger than last winter.

### New York Retail Prices.

Perles, Niphetos and Souvs, \$1.25 a dozen; Bon Silenes, 75 cents; Bennetts and Gontiers, \$1.50; Mermets, Dukes and Brides, \$2; Cusins, 1.75; La France and Cooks, \$2.50; Am. Beauties, \$5; hyacinths, \$1.50; carnations, 50 cents; lily of the valley, \$2; smilax, 40 cents a string; violets, \$1.50 a hundred.

Twombly & Sons had a grand opening of their new flower store on Nov. 9. The store was magnificently adorned with groups of fine palms and foliage plants, banks of chrysanthemums and a display of rich pottery. It is certainly a model flower store, with an immense show window and handsome glass front refrigerators, and is lighted throughout by the Edison system. The Lamson cash system has also been put in, and all the furnishings are first class.

Mr. W. A. Manda, gardener at the Botanic Gardens, is an enthusiast on cypripediums, and the collection which he has been gathering for some years now numbers upwards of 130 varieties. The conveniences for caring for them at

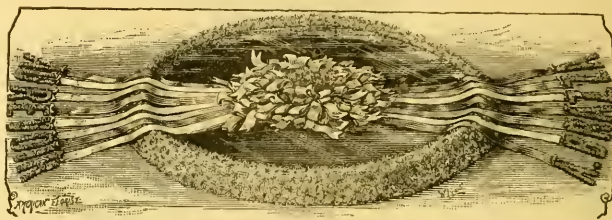


TABLE DECORATION.

### Boston.

Cold weather. Result—a booming Thanksgiving trade.

Chrysanthemums less abundant. Result—prices advancing on all other flowers, especially roses.

Peter Ball grows the finest American Beauties in this market—equal, in fact, to the best grown anywhere in this country.

Last year the growers swamped the market with white chrysanthemums. This year many of them were afraid of the white ones, and in consequence overstocked the market with colored varieties, especially yellow, and white ones have been none too plenty.

Romans, Paper White narcissus and scarlet Duc van Thol tulips have made their appearance here, but with the exception of Romans, there is little demand yet for this class of flowers.

Miss S. W. Story has opened a flower store in Allston not far from where she has carried on the greenhouse business for some years. If taste, energy and good nature count for anything, Miss Story will succeed.

E. Sheppard & Sons of Lowell are cutting some fine Puritan roses. Their violets were quite badly diseased early in the season, but they took them in, planted them on the driest side of the house, giving plenty of air, and they now look perfectly healthy. Mr. Sheppard regards this treatment as a certain cure.

The new carnation "White Gem" has been awarded a first-class certificate by the Mass. Hort. society. It certainly is a very promising variety as regards prolific blooming, vigorous constitution, as well as form and size of flower.

John A. Gormley, son of John Gormley, a well-known Boston florist, died recently of consumption while on his way home from California, whither he had gone for his health. He was a member of the Gardeners' and Florists' Club, and appropriate resolutions were adopted at the last meeting of the club.

the garden being very limited, Mr. Manda has built a house this season specially for these and other orchids. He is very successful in growing them, and has also been quite fortunate in acquiring new and rare varieties, some of which are in bloom now for the first time. He has also done considerable hybridizing, and some thrifty seedlings, as well as a number of plump seed pods, promise good results in the future from his skill. Mr. Manda also has a large number of odontoglossums and cattleyas in variety.

W. J. S.

### Klunder's Table Decoration.

In the center was a plate glass oval four feet in diameter, edged with a band of chrysanthemums. The letters at each end, which were ladies' favors, were composed of Neapolitan violets. Each letter had a broad ribbon attached, which was carried to the center of the glass, which represented the ocean. The ribbons formed a rosette of loops and ends, and in these were laid boutonnieres of forget-me-nots. "A Brazza" was held by red, white and green sashes—Italian colors—and "Au revoir" by red, white and blue. This dinner was given Count Brazza and his bride on the eve of their departure for across the ocean.

CUT FLOWER PRICES.—Those who write us asking about the variation in prices for cut flowers should bear in mind that the average run of stock as sold over the counter can be sold at a lower rate than shipping stock which must be carefully selected in order to arrive at its destination in a condition satisfactory to the buyer. The stock of cut roses which will turn out ninety good shipping buds to each root in to the wholesale dealer has been remarkably well cut—frequently the wastage is much heavier—while if sold over the counter nearly every flower can be utilized. If after taking this and the state of the market into consideration there is still a discrepancy the case might merit an investigation.

**THE AMERICAN FLORIST**

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 Cents a Line, Agate;  
inch, \$1.40; Column \$14.00.  
Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per  
cent; 12 months, 20 per cent.  
No reduction made for large space.The Advertising Department of the AMERICAN  
FLORIST is for Florists, Seedsmen, and dealers in  
wares pertaining to these lines ONLY. Please to  
remember it.For Advertisements for December 15 issue must  
REACH US by noon, Dec. 5. Address

THE AMERICAN FLORIST CO., Chicago.

## Catalogues Received.

E. Benard, Orleans, France, roses and  
nursery stock; J. J. Crusman, Clarks-  
ville, Tenn., bulbs; Dickson & Sons,  
Belfast, Ireland, roses; Thos. S. Ware,  
Tottenham, London, England, roses,  
peonies and plant novelties; Etablissement  
Horticole de Cochet, Suisses,  
France, rose novelties; Welch Bros.,  
Boston, Mass., cut flowers and florists'  
supplies; Chas. N. Woodruff & Co., Ma-  
con, Ga., plants; Leonard Lille & Beney,  
Lyon, France, seeds; Henry Rajsek &  
Bro., Kansas City, Mo., florists' wire de-  
signs. Michael Rains & Co., London,  
England, Dutch bulbs.

THE HOLIDAY NUMBER.—The next  
issue, published on the 15th, will be our  
annual holiday number. It will be un-  
usually attractive, and 3,000 extra copies  
will be mailed, making a total of 8,000  
copies. This issue will be of increased  
value to advertisers, who can avail them-  
selves of the increased circulation, with-  
out increase of rates. Send in your ad-  
vertisements now. Copy must reach us  
by Dec. 9 at latest in order to secure  
insertion in this issue.

It's a HARD THING to teach the intelli-  
gent printer to place the vegetable, flower  
or fruit illustrations right side up—as most  
florists know. Now comes the *Prairie  
Farmer*, with its editor of fifty years' ex-  
perience, and prints a fine illustration of  
Chinese primrose very gracefully reclin-  
ing on its side.

**W. S. ALLEN,**

WHOLESALE DEALER IN CUT FLOWERS,

36 EAST 23rd STREET, NEW YORK.

ESTABLISHED 1877.

Price List sent upon application.

**N. F. MCCARTHY & CO.****COMMISSION DEALERS**

IN CUT FLOWERS AND FLORISTS' SUPPLIES.

We make a specialty of Mermets, Niels, La France,  
Bennetts, Cooks, Perles, Niphetos, Grace Wilder and  
Anna Webb pinks, and all other flowers in variety.  
We price list nothing but first-class flowers and make  
a specialty of shipping; all flowers invariably ship-  
ped at buyers' risk. We handle as fine a stock as  
Boston produces. Auction sales of bedding plants:  
Spring sales every Wednesday and Saturday from  
April 25 to June 15. Fall sales from Sept. 1 to Oct. 1.

WRITE FOR PARTICULARS.

63 Bromfield Street, (under Hort. Hall),

BOSTON, MASS.

Mention American Florist.

**M. MALSH,**

206 S. Halsted Street, CHICAGO.

WHOLESALE DEALER IN

**CUT FLOWERS,**

AND GROWERS' AGENT.

Regular shipping orders especially solicited.

**Wholesale Markets.****Cut Flowers.**

	BOSTON, Nov. 25.
Roses, Teas.....	\$2.00 @ 2.50
" Perles, Niphetos.....	6.00
" Bennetts, Mermets.....	8.00
" La France.....	10.00
" An. Beauty.....	25.00
Lily of the valley.....	8.00
Romans, Narcissus.....	5.00
Carnations.....	1.50 @ 2.00
Smilax.....	12.50
Adiantums.....	1.50
Callas.....	12.00
Chrysanthemums, per bunch.....	.50

	NEW YORK, Nov. 25.
Roses, Perles, Niphetos.....	\$4.00
" Goniels, Soirs.....	4.00
" Bon Silenes.....	2.00
" Marmets, Cusins, Dukes.....	2.00
" La France.....	8.00 @ 10.00
" Bennetts, Brides.....	6.00
" An. Beauty.....	25.00 @ 30.00
" Puritan.....	25.00
Mignonette.....	2.00
Smilax.....	20.00
Carnations, fancy, long stems.....	1.50
Carnations, short.....	1.00
Hyacinths.....	4.00
Lily of the valley.....	8.00
Violets.....	1.50

	CHICAGO, Nov. 25.
Roses, Perles, Niphetos.....	\$4.00
" Mermets, Bennetts.....	10.00
" La France.....	10.00
" An. Beauty.....	25.00
" Safrans.....	3.00
" Bon Silenes.....	4.00 @ 5.00
Romans.....	5.00
Carnations, long stems.....	2.00 @ 3.00
Short stems.....	1.00
Callas.....	15.00
Smilax.....	22.00
Adiantum form.....	1.25
Ivy leaves, stavia.....	1.00
Violets, border.....	1.00
Chrysanthemums.....	2.00 @ 3.00

	PHILADELPHIA, Nov. 25.
Roses, Teas.....	\$2.00
" Perles, Mermets.....	4.00
" Brides.....	5.00
" La France, Bennetts.....	6.00
" An. Beauty.....	20.00
Carnations.....	1.00
Roman Hyacinths.....	1.25
Bonvardia.....	.75
Smilax.....	20.00
Callas.....	8.00
Callas.....	10.00
Violets, double.....	.75
Violets, single.....	.50

Flowers plentiful. Trade improving.

**FOR THE HOLIDAYS.**

And for all other occasions where First-  
Class Flowers are required, ORDER IN  
ADVANCE, and you will be well served.

Read the following unsolicited Testimonials:

ST. LOUIS, Mo., Nov. 3, 1886.  
J. S. WILSON & BRO.

TOLEDO, O., Dec. 27, 1886.  
The flowers you sent us last Friday were very  
fine. JAS. VIELAND.

DETROIT, MICH., Dec. 25, 1886.  
The flowers were lovely and came through beau-  
tifully. MRS. E. SUDER.

NEW ORLEANS, LA., Jan. 10, 1887.  
Flowers came in first-class condition; very satis-  
factory. R. MATTHE.

MILWAUKEE, WIS., Oct. 22, '87.  
Everything came in fine shape and on time.  
FRANK WHITNALL & CO.

OUR SPECIALTIES NOW ARE:

LILY OF THE VALLEY, FINE ROSES, VIO-  
LETS, LONG STEMMED CARNATIONS,  
JAPANESE CHRYSANTHEMUMS,  
PRIMULA ORCONICA, ADIAN-  
TUM FARLEYENSE AND CUNEATUM.

Holly, English Mistletoe, Palm Leaves  
and Pine Planes for the Holidays.

WM. J. STEWART,  
Send for price list. 67 Bromfield St., BOSTON.

**W. F. SHERIDAN,****WHOLESALE FLORIST**

721 SIXTH AVENUE, N. Y.

Mention American Florist.

LaRoche & Stahl,  
Florists & Commission Merchants  
—OF—  
CUT FLOWERS.

1237 Chestnut Street, PHILADELPHIA.  
Consignments Solicited. Special attention paid to  
shipping. Mention AMERICAN FLORIST.

Thos. Young, Jr., &amp; Co.,

**Wholesale Florists,**

INCORPORATED 1885,

23 W. 24th St., NEW YORK.

Speaking About

**CUT FLOWERS,**

You can get very fine cut roses,  
carnations and a full general  
line on shortest notice from J. C.  
VAUGHAN, 42 La Salle Street,  
Chicago. Store open day and  
night.

Refer to all florists west of  
Ohio river to Salt Lake City, as  
to prompt shipment and satis-  
factory stock.

**WELCH BROS.,**  
WHOLESALE FLORISTS,

165 Tremont Street, BOSTON MASS.

We make a specialty of shipping choice Roses and  
other Flowers, carefully packed, to all points in  
Western and Middle States.  
Return Telegram is sent immediately when it  
is impossible to call your order.

**HAMMOND & HUNTER,**

Wholesale dealers in

**Cut Flowers and Florists' Supplies**

61 West 30th Street, NEW YORK.

**GEO. MULLEN,**17 CHAPMAN PLACE, (near Parker House),  
BOSTON, MASS.**WHOLESALE AND COMMISSION DEALER IN****Fresh Cut Flowers & Florists' Supplies.**

Flowers carefully packed and shipped to all points  
in Western and Middle States.  
Orders by Telegraph, Mail, Telephone or Express  
promptly attended to.

A. M. &amp; J. B. MURDOCH,

WHOLESALE

**CUT FLOWERS.**

510 SMITHFIELD STREET,

PITTSBURGH, PA.

SEND FOR PRICE LIST.

CHAS. E. PENNOCK,

**WHOLESALE FLORIST,**

38 So. 16th Street, Philadelphia, Pa.

**C. STRAUSS & Co.**

Telephone 977-3. WASHINGTON, D. C.

Growers of and Wholesale Dealers in

**ROSES and OTHER CUT FLOWERS**

1000 Puritan Planted for coming Winter.

**CUT FLOWERS**

The choicest Cut Flowers at lowest market rates  
shipped C. O. D. Telephone connection. Use A. F.  
Code when ordering by telegraph. For prices, etc.,  
Address,

J. L. DILLON, BLOOMSBURG, PA.

ROSS & MILLANG,  
Wholesale Florists,

NO. 1168 BROADWAY,

(Formerly at 225 5th ave.)

Bet. 27th &amp; 28th sts., NEW YORK.



## Seed Trade.

SEED TRADE ASSOCIATION.—William Meggart, president, Wethersfield, Conn.; Albert M. McCullough, secretary, Cincinnati, O.

E. B. CROFUT & Co., Syracuse, N. Y., were reported closed Nov. 11.

F. N. LANG of Baraboo, Wis., will remove his seed store to St. Paul.

J. G. PEPPARD opens a wholesale house for grass and field seeds at 1220 Union avenue, Kansas City, Mo.

SECRETARY McCULLOUGH promises some interesting reading from the committee on newspaper circulations appointed at the June meeting of the seed trade.

NOW THAT the seedsmen are interested in the actual circulation of the various agricultural papers, be it known that the *FLORIST*, which has claimed to print but 4,000 copies, has actually averaged for the year past 4,406 copies per issue. All of which can be sworn and subscribed to.

S. H. PARVIN'S SONS, the advertising agents at Cincinnati, have sent out a list of agricultural papers showing who have and who have not agreed to the Seed Trade Association's request to abandon free seed distribution. Seedsmen and florists should send for the list, and place their 1888 advertising where it rightfully belongs.

W. D. WELCH, a traveling salesman for the Chicago seed house of J. Leland Fogg, was frozen to death near Waukegan, Ill., Nov. 19. Saturday morning Welch pushed out upon Grass Lake duck hunting. A terrible wind and snow storm came up, and not returning, a searching party was formed Sunday morning. His body was found in the boat frozen stiff, about two hundred yards from the shore. Welch was about thirty-four years old.

DUTY ON PEAS STILL UNKNOWN.—It is well known to all importing seedsmen that no uniformity existed at different points on the Canadian border as to the duty properly chargeable on the same. Therefore, though several decisions have recently been made covering the question, the *FLORIST* decided to learn directly from the various collectors just what they were charging, and to that end sent a score of letters to as many different ports, worded as follows: "Will you please state what duty you are now charging on garden peas imported through your district?" All but two replied: "Ten per cent. ad valorem, regardless of purpose for which they are used." St. Albans, Vt., replied: "If garden seed, only 20 per cent." The collector of Eastport, Me., said: "The duty on garden peas is 20 per cent." Evidently these gentlemen have not read Treasury decision rendered Dec. 9, 1886, or that of Sept. 26, 1887, No. 8445. [The *FLORIST* will print the decisions, with others, in an early issue.]

PRACTICAL FLORICULTURE.—A new and revised edition of this well-known book of Peter Henderson's has been published. It contains many additional features, covering the subject up to date. The illustrations showing the style of making up floral work, and contrasting the same with the styles in vogue when the first edition of the book was published in 1867, are of considerable interest as showing the great change in popular taste. Published by the O. Judd Co., New York, and A. McClurg & Co., Chicago.

## The Violet Disease.

The several theories advanced by different growers as to the cause and cure of the violet disease, have been read by me, with much interest; but the problem seems as much a mystery as ever. The theories are all guess-work—a groping in the dark—for the only facts that are commented upon are those which illustrate the manifestation of the disease; none bearing upon its origin and cause are alluded to. Until we can base our experiments upon a knowledge of the causes of the disease, we shall continue mystified. As the case stands now, the entire gardening world is baffled and remains in utter ignorance of the true character of that disease which has caused so many florists to give up violet growing in despair.

This question suggests itself: How can we attain a thorough knowledge of these causes? Men of patience and skill have been studying the matter for years. Formerly growing violet by thousands, and attaining the very best results possible, they were naturally determined to wrestle with the difficulty and conquer it. But not one has succeeded. All who have ever been troubled by this disease to any great extent, acknowledge their inability to account for it, or to cope with its ravages. Those that have escaped and still grow violets with success, vainly imagine that they know the secret and offer theory after theory; yet their exemption is due not to their more skillful cultivation, but to the accident of a more favorable location. No matter how closely we observe, we shall never learn how to prevent or arrest this disease by observation alone. It is the origin of the decay which lies shrouded in mystery, and this we can never ascertain by simply watching the effect produced by hidden causes.

In such matters as this, gardeners feel the lack of a more advanced education and training in those departments which have generally been considered of value only to the scientific man. To be a skillful cultivator it is not essential for a gardener to have book-learning. Many of our most successful growers are men who have had no other advantages than those that are derived from a thoroughly practical life. From boyhood their hours have been spent with plants, studying their nature and requirements, and endeavoring, by all the means available, to obtain that control of nature which will produce the best results. But the best gardeners are the men who will be the first to acknowledge a desire for a more extended information, and who are also willing to own that this information can only be gained by the close and protracted study of books. In such a subject as this now under consideration, practical knowledge is absolutely of no avail. That man only is competent to decide as to the causes of this disease, who is thoroughly acquainted with the principles of vegetable physiology. We are just beginning to comprehend that there is such a science, one that teaches us about the various foods that different plants love—how that which is meat to the one is poison to the other. It is comparatively easy for us to understand the temperatures suitable for the different plants we grow; but the knowledge of the foods necessary is something of which the most of us are ignorant. Whenever any disease, unknown to us before, makes its appearance, we immediately feel at a loss to account for its origin—puzzled to say whether the trouble comes from the soil

or from the atmosphere. What it is, we fully see. If *why* it is, remains beyond our ability to discern.

Should this be so? Ought we, as progressive men, to be content to allow any disease to baffle and defeat us? When farmers are troubled with insect ravages or diseased products, numbers of scientific men are ready and willing to aid him. Agricultural schools and colleges are available for his instruction. It is not too much to say, that if this violet disease was destroying any farm crop, there would, long ago, have appeared an accurate exposition of its nature. Once understand *this*, and the remedies for its prevention and eradication can soon be discovered.

That there are some districts where the violet still flourishes and is entirely exempt from disease is obvious to all. Why is this? That it is entirely by chance the plants are untouched, no intelligent cultivator believes. Just as surely as the fact, that wherever the disease appears there is a cause for it, so, wherever we find violets in a healthy condition, must this cause be absent. Like conditions will invariably produce like results. Reproduce the conditions that cause healthy vigor, and no disease will be manifested. To know whether this is possible we must first obtain certain information upon which to base our calculations. The atmosphere must be weighed and analyzed and its component parts well understood. The soils also must undergo the same process, and thus by comparison, we may perhaps be able to detect the hidden difficulty.

As the question exists at present we are acquainted with certain facts upon which we may found certain deductions. It was at first supposed that a high temperature was the cause of the disease. But this theory may be taken as completely disproved. The fact that men have kept violets in cold frames all the winter, and yet lost the greater part by the disease, sufficiently testifies to the fallacy of this idea. Take healthy violets and place them in a high temperature for the winter months, the result would be the growth of leaves, but no flowers. Disease would not be caused solely by such treatment. Others, again, claim that the injury is caused by unsuitable conditions of soil. Nothing of sufficient weight has yet been adduced to prove this theory. The disease manifests itself in all sections; upon light ground as well as heavy; upon poor soil in common with rich. Plants vigorous and weak are alike attacked; heavy waterings and light, seem of similar importance; all plans are equally futile to prevent the appearance of the dreaded evil.

The writer has no theory to expound. After growing violets with varying success for several years, he is still in doubt as to all that relates to the causes of the violet disease. Some few points have been observed in his own cultivation which may be of some interest. Contrary to the experience of many, the disease has never troubled the plants when in the open ground. Only after the plants are in their winter quarters and then not until firing commences is there any indication of decay. This has occurred for successive seasons, so that it is now looked upon as a settled thing in our cultivation of violets. The same treatment has always been applied. As soon as the leaves become spotted, they are immediately picked from the plants and taken from the violet house. This is followed up as long as decaying leaves are to be seen. This method, with us, prevents

a total failure of crop. Some years we are troubled more than others, but in every instance the plants, after the holidays, seem to recover their pristine vigor and flower abundantly until spring. Great care is observed in encouraging all root-action; from the idea that the plants will out-grow the disease if proper treatment is applied. Not once have the roots ever appeared affected. Plants have been often lifted and examined; always to observe the peculiar thread like roots which denote a working condition. To sum up briefly, low temperature, judicious watering and good soil, have always enabled the writer to bring diseased plants through without any considerable loss.

There is one phase of this violet disease which appears to have escaped the notice of some. Suppose we house good plants with plump and healthy crowns, without any trace of sickness. Soon they become covered with spotted leaves, indicating that the old enemy is again at its destroying work. But observation will show that new leaves are continually being unfolded, and if the plants were in good condition when housed, these leaves will appear in considerable quantity. At their first appearance they are clean and healthy-looking, quickly, however, becoming as their neighbors. Does not this tend to prove that the disease is atmospheric? Another fact in favor of this proposition is that if we get stock from those places where violets are free from disease, and try to grow them anywhere in the infected districts, the healthy plants will soon show the disease likewise.

It is to be hoped that thoughtful and intelligent florists will not allow themselves to be defeated by this problem. There is a solution. It remains to be seen whether the men of this generation will be the ones to unravel the riddle, or those who come after.

ALFRED E. WHITTLE.

#### Pruning Roses.

Am very glad to see my note in regard to pruning hybrid roses brought out a reply from Mr. May. But Mr. May seems to have arrived at the conclusion that I think we ought not to prune hybrid roses at all. Now, that is far from my idea. On the contrary, I always prune pretty severely; so on that subject I think my views are exactly the same as his. The idea I meant to convey with my note on the subject was: Let us do the pruning of roses for forcing with an eye to better develop the lower buds or those that we depend on for our crop of flowers. Now we know that roses out doors which are left undisturbed or only pruned very lightly will bloom quicker than those under the same circumstances which are pruned down to three or four buds, as is a very common custom. Now if these had been pruned in the fall, just before they become dormant, the checking of the upward flow of the sap has a tendency to cause the lower buds to swell and develop, and consequently they are ready to start into growth as soon as circumstances are favorable. What I mean by early pinching of the strong shoots is not to do it so early as to cause the lower buds to break out and make new growth the same season. That is something I would very seldom permit. I do this pinching just before putting them to rest or drying them off, merely to check the flow of the sap, so as to make the plant nourish those lower buds better, instead of the upper buds, which, if the plant is left undisturbed, will receive all while the lower buds are starving.

Mr. May states he had last season roses in bloom forty-five days after pruning. This is certainly very remarkable, and shows that the plants were in splendid condition, or else it would be impossible with the same amount of heat as used by Mr. May. I would like to know if those not taken in till nine weeks after pruning did not beat the record of the first lot by at least eight or ten days. Such has been my experience. I may be mistaken, as I do not claim to be an expert in the forcing of roses, not having had any opportunity to do any forcing the last seven or eight years. AUG. S. S.

#### Judging at Competitive Exhibitions.

At the recent Chicago show Mr. J. M. Jordan of St. Louis, who acted as one of the judges, suggested the following rules to govern the judges in making the awards, and they were adopted: No comment on the merits of an exhibit to be made by any of the judges. Each entry to be voted on separately, too to be considered the judge's idea of perfection. In voting, each judge to write on a piece of paper the percentage of excellence which he considers the exhibit to possess, and hand the same to the clerk, who will add together the various amounts and divide the same by the number of judges, thus obtaining an average. The exhibit having the highest average shall receive first premium, the next highest shall receive second premium, the remaining premiums, if any, in same manner. No exhibit to receive first premium unless its meritorious points shall average 50 per cent. or over.

This plan can be elaborated upon. In judging, for instance, a floral design, a vote can be taken alone upon the taste displayed, and averaged; then a vote upon the quality of flowers used, and averaged; also a vote upon originality of design, and averaged; the final judgment to be obtained by computing the total amount of the three averages and dividing it by three, which will give the grand average. This method is of value as representing the judgment of each judge, unbiased by the opinion of any of his associates, and expedites matters considerably. Further, it is of interest to the competitors to know the exact degree of comparative excellence his entry was considered to have attained.

**CHRYSANTHEMUMS AS BEDDING PLANTS.**—A very pretty bed at Kew is composed of a center of Madame Desgrange chrysanthemum, the flowers of which are whitish outside, with a pale sulphur center surrounded by a belt of Precocite, a dwarf variety with yellow flowers flushed with red.—*Gardeners' Chronicle.*

#### GROWTAGE'S PATENT BUILDING FOR HORTICULTURE



—GLAZED WITHOUT PUTTY.—  
Endorsed by the New York Horticultural Society.  
Illustrated Circular mailed on application.  
Plans and estimates given for every description of Horticultural Buildings.

H. J. GROWTAGE,

76 Myrtle Avenue, BROOKLYN, N. Y.

#### A. B. CLEVELAND COMPANY,

LIMITED.

At a meeting of the Board of Directors held at the office of this Company, Nos. 47 and 49 Cortlandt street, New York City, November 19, 1887, the following resolutions were unanimously adopted:

WHEREAS, This Board has learned with profound sorrow of the decease of Mr. James Reid, late a Director of this Company, and closely identified with its business, and

WHEREAS, His social qualities and eminent business abilities render it fitting that some expression of the high esteem in which he was held by his associates in this Company should be recorded;

Now be it resolved that by his death we as individuals have lost a genial personal friend, and our Company a wise counsellor whose place we cannot fill.

Resolved, That they tender to his sorrowing family our heartfelt sympathy.

Resolved, That these resolutions be spread at large upon the minutes, and that they be suitably published in the newspapers.

A. B. CLEVELAND, President.



#### TRY DREER'S GARDEN SEEDS

Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free.

HENRY A. DREER, Philadelphia

**MELON SEEDS** 14c. to 40c. per pound. Send for PRICE LIST. Odella, Black Spanish, Koli Gem, Dark Icing, Iron Clad, Pride of Georgia, Hackensack, Bird, Golden Gem, Banana. FREEMAN HURFF, Swedesboro, N. J.

#### PAPER SEED BAGS, BEST QUALITY AND AT LOWEST PRICES.

Many years' experience in the Seed Business enables me to make Catalogue Work and Seed Bag Printing a Specialty. Refer to Philadelphia, Pa.

GEO. A. KARK, Philadelphia, Pa.

#### SMASH IN PRICES OF POTS!

Thumbs.....\$2.54 No. 3 Rose, \$3.70 3 1/2 inch.....\$6.29  
2 1/2 inch..... 3.35 No. 2 Rose, 4.00 4 inch..... 7.91  
2 1/2 inch..... 3.87 No. 1 Rose, 4.33 4 1/2 inch..... 10.83  
3 1/2 inch..... 4.75 Special Size, 4.61 5 1/2 inch..... 13.75  
Above prices per 1000, good full size, 100, all packed and delivered free on board cars. We ship all over U. S. Free samples with first crate. Order a trial crate. Add the if you send check. Write for list and list of prices at which we pack to order assorted sizes in a crate. State the amount and sizes you need. At the very low prices above quoted we sell only in our

#### READY PACKED CRATES

Shipped at buyer's risk and freight; cash with order, PRICES BY THE CRATE: 3,150 Thumbs, \$5.00; 2,025 2 1/2 inch, \$5.00; 1,000 No. 2 Rose, \$5.00; 1,875 2 1/2 inch, 7.25; 1,000 No. 2 Rose, 6.40; 1,150 3 1/2 inch, 5.50; 1,500 No. 1 Rose, 6.30; 875 3 1/2 inch, 5.40; 1,000 special 5 1/2, 6.00; 600 4 inch, 4.75; 320 5 inch, 4.40; 300 4 1/2 inch, 5.90; 100 6 inch, 5.50;

#### SYRACUSE POTTERY,

J. N. PERKINS, Manager, Syracuse, N. Y.

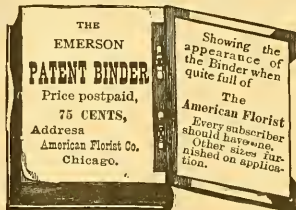
ONLY POTTERY MAKING A SPECIALTY OF

#### FLOWER POTS

FOR FLORISTS.

THE WHILLDIN POTTERY CO.,

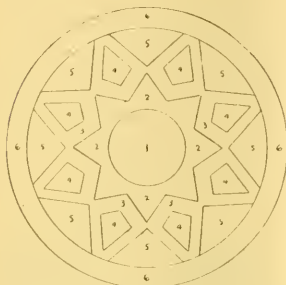
713 & 715 WHARTON ST.,  
PHILADELPHIA.





## Fancy Bedding.

We give below a diagram of a very attractive mosaic bed which last summer ornamented Drexel boulevard, Chicago. It was eighteen feet in diameter.



KEY TO DIAGRAM.

1. Achyranthus metallica. 2. Alternanthera Herbistii. 3. Alter. aurea. 4. Alter. versicolor. 5. Alyssum Tom Thunb. 6. Alter. amœna.

PITTSBURGH.—A handsome funeral design recently arranged by J. R. & A. Murdoch was a broken column four and one-half feet in height. The shaft was of white carnations and asters, with a loose garland of light-colored roses; at the foot was a wreath of heliotrope. Three smaller designs ornamented the square base—a crescent, cross and star. Arches of La France roses supported the whole against a background of palms and adiantum ferns. The Western Pennsylvania Botanical Society held a meeting and elected officers Oct. 27, with the following result: John D. Shafer, Esq., president; Dr. A. Koenig, vice-president; Miss Willa Matthews, recording secretary; Prof. B. H. Patterson, corresponding secretary; C. C. Mellor, treasurer; Dr. W. R. Hamilton, I. A. Shafer, Prof. W. S. Jackson and Prof. B. H. Patterson, executive committee. At a fashionable wedding which will take place within a few weeks almost the entire floral decoration of church and home will be of chrysanthemums, in honor of the wishes of the bride, who regards the flower as a favorite. The bridesmaids, it is said, will each carry a bouquet of this flower.

THE NEW YORK RAILROAD GAZETTE of Oct. 21 contains a lengthy article on "Flowers at Your Station." Much practical information is given, and a list of plants most suitable for planting around stations is printed, with average wholesale prices for same. The article is also liberally illustrated. It is to be hoped that much good may result from it, going as the paper does to those who have control of the railroads of the country. When the grounds around railway stations shall have become neatly kept gardens, and a pleasure to the eye instead of the remarkably unkempt places the majority of them now are, a great advance will certainly have been made.

LINDENIA.—No. 3, vol. 3, o this sumptuous publication, which is devoted entirely to orchids, contains colored plates of *Miltonia spectabilis* Moreliana Hort.; *Paphinia Lindeniana* Rehb. f.; *Odontoglossum crispum* Trianae; and *Bulbophyllum grandiflorum* B1.

WASHINGTON.—"The Rose and the Lily" is the title of a new store on F street opened by Morton & Co.

"AND STILL THEY DON'T, YOU KNOW."—An anglo-maniac who recently visited a leading florist's, exclaimed on entering: "The beautiful flowers! They smell like orange blossoms, you know." And as he buried his nose in a bunch of lantanas he suddenly continued: "And still they don't, you know!"

A WAIFLET.—The following sample of the paragrapher's skill is making the rounds of the daily press: "A young man in Albany, who was going to take his friend to the theater, telephoned to a florist to send a bouquet to the lady and send the bill to him. Time wore on, and the young man was dressing for the

theater when the florist's boy called and left a bouquet. It didn't take long for the horrible truth to creep through his brain, and it was confirmed when he went to see the florist—the bouquet had come to him; the bill had gone to the girl."

FAST SAGINAW, MICH.—The annual meeting of the Michigan Hort. society occurs here Dec. 6-10. The programme for the afternoon of the first day is as follows: Report on Landscape gardening; The Thorns as decorative trees and shrubs; Success with ferns for out-of-door planting; Bedding plants and their management; Grouping for effect; Carpet bedding; Watering lawns; Front fences and division fences on city and village lots.



THE  
American Florist Company's

# ◦ DIRECTORY ◦

OF



{ FLORISTS,  
NURSERYMEN,  
AND SEEDSMEN,

OF THE

UNITED STATES AND CANADA.

1887.

PRICE ONE DOLLAR.

The most complete and accurate list yet published. The key designates the particular branch of the trade each one is engaged in. The street and number of those living in cities will insure the delivery of tons of catalogues which have hitherto remained dead in the office to which they were addressed. At this low price every one in the trade can afford to have a copy for reference. Address

AMERICAN FLORIST CO.,

54 LA SALLE ST., CHICAGO.

R. VAN DER SCHOOT & SON,  
WHOLESALE  
**BULB GROWERS,**  
HILLEGOM, HOLLAND.

**AUGUST RÖLKER & SONS,**  
44 Dey St., NEW YORK,  
Supply the Trade with  
**SEEDS, BULBS,**  
And all kinds of  
**FLORISTS' SUPPLIES.**

## NEW CROP SEEDS.

New crop of the following seeds is now ready. They will be sent postpaid on receipt of price.  
**AMPELOPSIS VEITCHII** (Crop 1887.) If this seed is sown at once it will make good salable plants for next spring's trade. One ounce contains twelve hundred seeds. Per trade pkt., 10 cents; per oz., 30 cents; per lb., \$5.00.  
**SMILAX** (Myrsiphyllum Asparagoides). (Crop 1887). Per trade pkt., 25 cents; per oz., \$1.75.  
**GERANIUM, Apple-Scented.** (Trade). (Crop 1887). Per 100 seeds, 50 cents.  
**SALVIA SPLENDENS.** (Scarlet Sage). (Crop 1887). Per trade pkt., 25 cents; per oz., \$3.00.  
One packet of each of the above, postpaid, for \$1.00.

**ROBT. J. MALLIDAY,**  
SEEDSMAN AND FLORIST,  
BALTIMORE CITY, MD.

## DAHLIA \* \* \* \* ODORATA.

Sweet-scented Single Dahlia, very dark black-bron, excellent for fine floral work, offered in original roots, at  
\$2.50 EACH; 10 FOR \$22.50.

**J. SIEKMANN,**  
Kostritz (Thuringia), GERMANY.

FRENCH AND AMERICAN  
**NOVELTIES FOR 1887**

— IN —  
**ROSES, CARNATIONS, CHRYSANTHEMUMS, GERANIUMS, ETC.**

Special offer of  
**OUR NEW SEEDLING WHITE CARNATION SILVER SPRAY,**  
The Best White for Florists' use.

We have also a splendid stock of Geraniums and Fuchsias in 2½-in. pots, of last spring's propagation. Our Fall Price List with prices and descriptions now out; send for a copy.

**W. P. SIMMONS & CO.**  
GENEVA, OHIO.

✦ We issue no Retail Catalogue.  
Mention American Florist.

## \* \* HYACINTHS. \* \*

Finest quality irrespective of name, sold and labeled true to name at the following figures:

	SINGLE.	Per 100
Red and Rose.....		\$3.75
White.....		4.00
Blue.....		2.75
Yellow.....		4.00
	DOUBLE.	
Red and Rose.....		3.50
White.....		4.25
Blue.....		2.75
Yellow.....		5.00

All select bulbs. Send for catalogue.

**E. HIPPARD, Youngstown, O.**

A CIRCULAR OF DESCRIPTION, &C., FOR OUR

## New Tomato, "Volunteer,"

— AND —

## New "Carnation Striped" Zinnias,

Will be sent to the trade during this month, in time to insert in Spring Catalogues.

**V. M. MALLOCK & SON,**  
QUEENS, NEW YORK.



## READY NOW:

Fine LILY of the VALLEY PIPS and SPIREA JAPONICA CLUMPS. Extra FINE TUBEROSE BULBS, PEARL and ITALIAN.

### STILL IN STOCK:

HYACINTHS, TULIPS, NARCISSESS, ROMAN HYACINTHS, LILIU CANDIDUM, LILIU AURATUM, LILIU RUBRUM, LONGIFLORUM, &C., &C.

### FOR THE HOLIDAYS:

HOLLY, BOUQUET GREEN, WREATHING HOLLY WREATHS, PAMPAS PLUMES, IMMORTELLES, &c., &c.  
Send for Catalogue and Special Holiday List.

**JAMES KING,**

170 LAKE ST., CHICAGO.

**F. E. McALLISTER,**

— WHOLESALE DEALER IN —

Seeds For the Florist Market, Garden-er and Farmer. Such as Baskets, Im-mortelles, Grasses, Mosses, Bouquet Pa-pers, Pampas, Plumes, etc. For the Green-house or Garden.

22 Dey Street, - - - NEW YORK.

## GRAND \* STOCK \* PLANTS. MAMMOTH VERBENAS

(One plant of which now, is worth ten in January.)

12 finest selected market sorts, \$3.00 per 100; \$25.00 per 1,000; embracing best contrasting colors.

**GERANIUMS**—12 best double market sorts, \$6.00 per 100; \$50.00 per 1,000.

**PRIMULAS**—Single, six distinct colors, \$6.00 per 100; \$50.00 per 1,000.

**SMILAX**—\$4.00 per 100; \$30.00 per 1,000.

NEW WHOLESALE LIST SENT ON APPLICATION.

## PETER HENDERSON & Co.,

35 and 37 Cortlandt Street, NEW YORK.

We Again Offer our  
First-Class Holly—Good  
Green, Plenty of Berries,  
and can quote Special  
Rates to important points  
North, South and West.

# HOLLY

Per Case, \$5.00; 3 Cases for \$13.50. Larger Lots on application. Order Early, and you will have the Holly in ample time. We can refer to Florists in all large cities. THOS. G. HAROLD, Kingston, Somerset Co., Md.

## SPECIAL LIST.

	Per 100
Carnations, Hinz's White, 2-inch pots.....	\$2.00
Geraniums, dble. and sgl., 100 var. 2½-in. pots.....	3.00
Roses, American Beauty, 3-inch pots.....	8.00
Candens, Berles, Souv. d'un Ami, 3-in.....	6.00
" S. de St. Pierre, The Bride, Sunset.....	6.00
Coleus, 24 varieties.....	3.00
Feverfew, Little Gem.....	2.50
Hedera variegata, 2-feet.....	4.00
10,000 Roses, ass't. 2-inch pots.....per 1,000, \$25.00;	3.00

**A. GIDDINGS, DANVILLE, ILL.**

## BULBS! BULBS! BULBS!

Before placing your order for HOLLAND BULBS write me for my trade list. I have made special arrangements with some of the largest growers in Holland, and can offer you TERMS and PRICES better than any other firm does. All orders over ten dollars will receive a CREDIT until May 1, 1888. Write for terms and prices.

**E. HIPPARD, Youngstown, Ohio.**



## Philadelphia.

The Pennsylvania Hort. society elected officers for the ensuing year as follows: President, Isaac C. Price; vice-presidents, Robert Craig, Dr. S. M. Gross, George W. Earl and W. A. Reed, M. D.; treasurer, Wm. F. Dreer; corresponding secretary, Thomas Meehan; recording secretary, Edwin Lonsdale.

The third annual chrysanthemum supper was held under the auspices of the Florists' Club of Philadelphia on Tuesday evening, Nov. 8, in one of the reception rooms in Horticultural hall. Mr. Isaac C. Price occupied the place of honor, and Robert Craig officiated as toast master. Speeches eloquent and speeches historical, as well as speeches humorous (which were interspersed with appropriate vocal music), made the evening a memorable one. "Dan" (D. D. L. Farson) was in his happiest mood, and kept the company in rare good humor the whole evening. Amongst the distinguished guests present were F. L. Harris, David Allan and Wm. Robinson, all of Boston, who acted as judges on plants; and John N. May of Summit, N. J.; J. M. Kellar, Bay Ridge, N. Y.; and John G. Gardner, Jobstown, N. J., who were judges on cut flowers, chrysanthemums, roses, etc.; James A. Penman (Dictionary of Gardening), Richard Brett, Short Hills, N. J.; E. V. Hallock, Queens, N. Y., as well as several others whose names cannot be recalled at this time. The hilarity was kept up until the wee small hours of the morning.

President T. H. Spaulding of the New York Hort. society and Secretary John Thorpe made a flying visit to the chrysanthemum show on Thursday evening, and brought over with them some of the best flowers of the New York show, and they were exhibited in the name of the New York Hort. society. Some of President Spaulding's own seedlings were very fine and distinct; amongst them were Mrs. T. H. Spaulding, Dragon's Thread, George McClure and Leopard. I am not quite sure whether the latter is one of Mr. Spaulding's seedlings or not.

A seedling exhibited by Mr. Richard Brett, gardener to James R. Pitcher, Esq., Short Hills, N. J., attracted a great deal of attention at our show. It was entered for the "Sunnyside prize"—a silver cup valued at \$25—offered by Mrs. Joel J. Bailey for the best seedling never before exhibited. Its peculiarity lay in the formation of the petals, which resembled somewhat a wheel in motion. It was likened to a "spinning wheel" (fireworks). Its distinctness recommended itself to nearly everybody, and it may be the forerunner of a new type. It is certainly new in itself. It has been named "Miss Ellen K. Pitcher."

Respecting trade in this city, chrysanthemum flowers make all other flowers seem plentiful. Roses generally are good and cheap; Puritan is not quite up to anticipations this year; it is selling wholesale at \$10 per 100. This is entirely too low in price for a new rose which was sent out so recently at such high figures. It fails to open well in the center, showing a green heart too often.

From present indications, Princess Beatrice will not be a favorite for winter blooming in Philadelphia. There is nothing overwhelmingly distinct about it. It has the appearance of having a vigorous constitution, and as the flower is double, it ought to be a valuable rose for out of doors.

Joseph Kift & Sons have moved into a new store, which it is safe to say in

many respects is the best for florists' purposes in the city. If my memory serves me correctly, the store is not less than 100 feet long by twenty or twenty-five feet wide. It is well lighted by skylights from above, giving more direct light, I think, than was obtained in the greenhouse at the old stand.

E. D. WYNNE.

## Trade Notes.

OMAHA, NEB.—T. W. Parker has started into business here with six greenhouses, 100 x 22 each. He has also opened a down-town store in Boyd's Opera house.

TOPEKA, KAN.—Jas. Hayes, late of Baltimore, has bought two acres of land on Euclid avenue and built two rose houses 75 x 18. Hiram Hulsh has enlarged his place on Elmwood avenue.

ST. LOUIS.—Fire in the greenhouses of A. R. Kellam, 3511 Harper street, Nov. 20, caused a loss estimated at \$400 on buildings and \$2,000 on plants. The fire was caused by a defect in the heating apparatus. No insurance.

LA CROSSE, WIS.—A heavy hail storm which occurred here Oct. 6 smashed something over a thousand feet of glass on the greenhouses of P. E. Steves. Other greenhouses also suffered, but only slightly, none losing over a hundred feet.

CINCINNATI, NOV. 26.—Chas. L. Mitchell's greenhouses on East Walnut Hills were badly damaged by fire yesterday morning. The ends of three rose houses were burned as well as the main building and office. The loss is estimated at from \$3,000 to \$4,000, fully covered by insurance.

WINNIPEG, MANITOBA.—The River Avenue nurseries have added two new houses (about 2,500 feet of glass), and Robert Alston of the Broadway greenhouses has erected this season three new houses, one 100 x 22. John Davy's show of chrysanthemums would not disgrace a city a thousand miles south of this.

BALTIMORE.—The greenhouses and store formerly operated by Mrs. Eichelberger have been purchased by a Mr. Perry. Mr. Dungan, at one time with Messrs. Pennock Bros. of Philadelphia, is superintendent, and under his management many needed improvements are being made.

HINSDALE, N. Y.—Julius Scharff, for some years past foreman to J. L. Childs, has bought a piece of ground close by Hinsdale station, and is to begin at once to build some greenhouses on it. His present engagement does not terminate till next September, by which time he expects to have his own place in fairly good fix to go into.

SAN FRANCISCO.—The floral decorations at a recent reception given by Mrs. Fair on the occasion of the debut of her daughter are described by the daily *Examiner* as unusually elaborate. A floral rainbow was a feature, and the whole house was strewn with loose flowers and foliage, among the latter being papyrus and bamboo in addition to adiantum ferns and cyperus. Draperies of white tulle were fastened irregularly with loose bunches of roses over the mirrors, the casings of the windows and again to the chandeliers. All the flowers were white

with exception of the roses. A doorway closed by a light gate of bamboo covered with roses led into a pretty dove cote which stood upon a moss grown stump, about which were placed a number of palms and above which tall bamboo stalks hung their slender leaves. There were doves in the branches, doves going in and out of their picturesque dwelling, doves playing overhead and one drinking at the bowl in the corner, where a mirror reflected his form. A large drawing room was decorated entirely with white chrysanthemums. Each of the three large mirrors was treated in a different fashion. Over one hung two wreaths of large chrysanthemums at different heights connected by a chain of white abutilons. Another had a pretty half canopy of white silk netting held out from the top of the frame by dark colored bamboo poles. Garlands of small white chrysanthemums drooped from it and twined around the supports and from one side hung a basket of Mrs. Langtry chrysanthemums. The third mirror was decorated with garlands of the same flowers and from the top, suspended by ribbons were balls of the same. A prominent feature of the decoration was the use of loose flowers in every possible place where they could be used to advantage. Mary D. Bates the Washington street florist was the designer.

## SMILAX.

10,000 Strings of Smilax for the trade. Steady contracts solicited.

F. E. FASSETT & BRO.,  
ASHTABULA, OHIO.

## \* PEACH \* PITS \*

## FOR NURSERYMEN.

We offer the following at net cash prices, f. o. b. cars at Philadelphia—sacks included. They are put up in sacks containing two bushels by measure.

TENNESSEE NATURAL, \$2.00.

VIRGINIA NATURAL, \$1.75.

SMOCKS, \$1.25, and

MIXED AT \$1.00 per Bushel.

CATALOGUES FREE.

Wm. H. SMITH, Seedsman,

P. O. Box 1570. 1018 Market St., PHILADELPHIA.

Mention American Florist.

## XMAS TREES.

### Blue Spruce.

Per 100

2 to 3 ft.... \$ 6.00

3 to 5 ft.... 10.00

5 to 8 ft.... 15.00

Packed in light cases, on car here. Special prices on car lots.

W. D. Boynton,  
SHIOCTON,  
Wisconsin.

Mention American Florist.

## NURSERY GROWN

## CHRISTMAS TREES.

NORWAY SPRUCE 6 to 12 feet high, 6c. per foot; 12 to 20 feet, 8c. per foot.  
SCOTCH WHITE and RED PINE one-half price of Spruce, 10 per cent. off on orders of 50 trees or over.  
ARBOR VITAE TRIMMINGS \$1.50 per barrel.

Order Early. Reference required.

J. BANCROFT, FLORIST,  
CEDAR FALLS, IOWA.



ANACOSTIA P. O., D. C.



## Cincinnati.

There are more funerals than parties this winter.

George B. F. Meek, an over the river florist, was married at Louisville a few days ago to Miss Mamie P. Rice.

There is another florist's store to chronicle—Underwood's, on Central avenue. Visitors to the hospital will not have far to go to order flowers for the sick.

Critchell says "Most of the designs now made for funerals are conventional—Bibles, columns and crosses—but they are upon a much larger scale than formerly." B. P. smiles. With coal at 22 cents a bushel, and furnaces heated with crude oil, he can afford to.

Some of the Cincinnati florists were largely patronized by the South for the Cleveland receptions. Gardner officiated at Montgomery, Ala., and Kelly at Atlanta, Ga. Kelly arranged a banquet room in all golden-colored flowers, corresponding with the general outfit, which was also in gold.

The Cincinnati centennial exposition is going to make things lively for the florists. Horticultural hall is to be remodeled and the sole contract to be awarded to one man. The florist presenting plans best suited to the wants of the board of exposition commissioners will get the award of contract. A large sum of money is set aside for the work, and florists all over the country ought to benefit by it. Gardner, the Floral Co. and Critchell are the florists who have submitted plans.

REN MULFORD, JR.

## ERNST KAUFMANN,

113 N. 4th Street, PHILADELPHIA, PA.

## HEADQUARTERS FOR

Immortal, Grapes, Mosses,

BOUQUET PAPERS.

PAMPAS PLUMES. WHEAT SHEAVES.

And all other Supplies.

MANUFACTURER AND IMPORTER OF

BASKETS AND DESIGNS.



## Florist's Letters

Patent applied for.  
These letters are made of the best Immortelles, wired on wood or metal frames with holes to insert toothpicks.

Prices on Wood Frames:

2-in. Purple... Per 100 \$3.00

Less than 100, 35c.

2 1/2-in. Purple. Per 100 \$4.00

Send for sample. Postage

10c. per 100. Script lettering

on Metal Frames any

word, 2c. per letter.

Designs, Monograms, etc.

W. C. KRICK,

1107 Broadway, Brooklyn,

N. Y.

J. C. VAUGHAN, Chicago,

Agt. west of Pennsylvania.

## RHODODENDRONS

Being the representatives in the U. S. for Messrs.

Jno. Watterer & Sons,

The great English Rhododendron growers, we are prepared to furnish Rhododendrons of all sizes and in any quantity at prices lower than ever before offered in this country. Orders now solicited for spring delivery. Prices on application.

B. A. ELLIOTT CO. Pittsburgh, Pa.

## M. M. BAYERSDORFER &amp; CO.

56 N. 4th Street, Philadelphia, Pa.,

Manufacturers and Importers of

## Baskets &amp; Florists' Supplies

NEW CATALOGUE READY,

and sent free on application.

## SASH BARS.

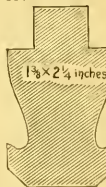
IN EITHER PINE OR CYPRESS.

We carry a large stock in

12, 14 and 16 FOOT LENGTHS,

CLEAR CYPRESS \$2 per 100 ft.

1st & 2d Cypress \$1.65 " "



## VENTILATORS

Made to Order. Write for Estimates.

JOHN L. DIEZ & CO.,

530 N. Halsted St., CHICAGO.

## INDESTRUCTIBLE BENCHES

Can be made by using

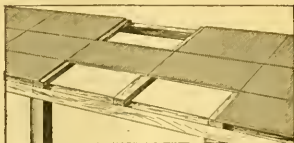
## SLATES

THEY ARE AS

Cheap as Wood

—AND—

Every way Better



They will last a life time and you will not be troubled with fungus from rotting wood. They transmit bottom heat better than wood.

Price, \$22.50 for 1,000 sq. feet of surface.

SLATES 1-3 IN. THICK, 20, 22, 24 INCHES LONG.

## AGENTS:

NORTHERN NEW JERSEY, JOHN N. MAY, Summit N. J.  
NEW YORK AND NEW ENGLAND, SIERRECHT & WADLEY, 409 Fifth Ave., N. Y.

FROM PITTSBURGH WEST, J. C. VAUGHAN, 42 La Salle St., Chicago.

CRAIG & BRO., 49th and Market Streets, Philadelphia, Pa.

CLIAS. S. PRICE, Lansdowne, Pa.

## 500,000 CUT FERNS



These Ferns are from 10 to 15 inches long, of a beautiful dark green, and will keep for several weeks. They are used for

BOUQUET AND BASKET WORK, FILLING VASES.

DECORATING CHURCH ALTARS, ETC., ETC.

Are preferred by many to Smilax.

\$1.50 Per Thousand Ferns.

## 1000 BBLs. BOUQUET GREEN

Barrel or Sack of 20 lbs. .... \$ 2.00

100 lbs. .... \$55.00; 2,000 lbs. .... 100.00

1,000 lbs. .... \$55.00; 2,000 lbs. .... 100.00

## 25,000 Yds. Weathing or Roping.

This Roping is made from First-Quality BOUQUET GREEN wound with fine wire in thorough manner. Having used all kinds of material for Roping I have discarded them all and now use nothing but Bouquet Green. Reasons why it is the BEST: 1. It is the handsomest material nature produces. 2. It will stand the roughest kind of usage. 3. It will hold its color. 4. It will not shed or droop.

Wholesale Price.

Per yard

3-inches diameter, flat or one-sided, ..... 4 cts.

4-inches " round with cord in center, ..... 6 "

5-inches " round with cord in center, ..... 8 "

5-inches " round, on heavy cord, ..... 10 "



## 10,000 Christmas Trees

FROM 3 FT. TO 30 FT. HIGH.

Fresh from the beautiful Berkshire Hills of old Massachusetts, where the finest shaped trees in the world grow.

Wholesale price of CHRISTMAS TREES put on cars at Hinsdale, Mass. If shipped from New York City add one-half to these prices:

	Each.
4 to 5 ft. high .....	\$ .10 to .15
6 to 7 " .....	.20 to .30
8 to 9 " .....	.40 to .50
10 to 11 " .....	.60 to .75
12 to 13 " .....	.85 to 1.00
14 to 15 " .....	1.25 to 1.50
16 to 17 " .....	1.75 to 2.00
18 to 20 " .....	2.50 to 3.00
25 to 30 " .....	4.00 to 6.00

TREE FEET of all sizes. 15-in. square, pyramid, four blocks high, 5cc; 15-in. 35c; 12-in. three blocks high, 25c; 9-in. 15c. Crosses, 15, 24, 30, 36, 42, 48, 60, 72 inches one cent an inch including braces, all painted two cents green.

SPHAGNUM MOSS, \$1.00 per Bbl., 6 Bbls. for \$5.00.

GOODS SHIPPED TO ALL PARTS OF THE U. S.

L. B. BRAGUE,  
HINSDALE, MASS.

After Dec. 5th at the Old Stand, 47th St. and Lexington Ave., N. Y.

Terms Cash, or 30 days approved credit. All bills must be paid on or before January 1st, 1888.





## Striking Pelargonium Cuttings.

These do not always strike as freely as could be wished. This season we chose a fresh place for ours, and in consequence have met with success. In a narrow span-roofed house a lot of young crotons were growing in small pots. Among these were placed the pelargonium cuttings in a 3-inch pot, and so on. The cuttings, short, stout and well ripened, were inserted in sandy soil in the middle of August. The soil in the pots was kept moist, but not wet, mainly by the syringing of the crotons overhead twice daily. This and the slight shade formed by the plants, and a gentle warmth which was necessary, quickly caused the pelargoniums to form roots. At the present time most of them have been potted off singly into small pots and are now stocky little stuff, promising well to form desirable plants by June next year.—S., in *London Garden*.

**POT DRAINAGE.**—May I make a suggestion as to the advantage of using coal cinders for draining pots, instead of stones or broken pieces of pots? Most of the plants I have had from florists were drained with bits of old pots, covered with leaves to keep the earth from washing in. In a short time the worms would eat the leaves and crawl around among the potsherds, choking them with earth and spoiling the drainage so as to make the plants difficult to manage. Now I turn such plants out and repot them, with a handful of cinders in the bottom of the pot, covered with sphagnum moss. This drains to perfection, and the worms seldom or never venture among the cinders, probably for fear of getting scratched by the rough surfaces, so that the drainage never gets clogged. Even when plunged in ordinary earth the worms do not seem to attempt to get into the pots which have cinders in the bottom.

AMATEUR.

## POTS.

Pots from 2-in. to 12-inches,

— IN —

Quantity to suit purchaser,

— AND —

QUALITY not to be SURPASSED.

SEND FOR LIST.

GEO. W. MILLER,

WRIGHT'S GROVE, CHICAGO.

Mention American Florist.



ALL SIZES OF SINGLE AND DOUBLE THICK

GLASS FOR GREENHOUSES.

ALL GLAZIERS' SUPPLIES.

Write for Latest Prices.

FOR THE TRADE.  
FLORAL WIRE DESIGNS.

JAS. GRIFFITH,

THE PIONEER MANUFACTURER IN THE WEST,

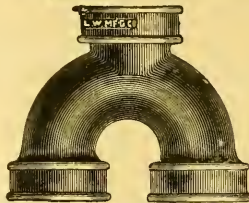
305 Main Street.

CINCINNATI, OHIO.

SEND FOR WHOLESALE PRICE LIST.



## Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

## GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

Mention American Florist.

L. Wolff Mfg. Co., 93 to 111 W. Lake St. CHICAGO

## GURNEY'S NEW HOT WATER HEATER.

THE CHEAPEST AND BEST FOR  
Greenhouses, Conservatories and  
DWELLING HOUSES.

THE GURNEY HEATERS present more water surface to the direct action of the fire than any others (known to us) in use. They are the easiest to keep clean, and with due attention almost any kind of fuel may be used.

EASILY REGULATED.

SIMPLE AND EFFICIENT  
SAFE AND ECONOMICAL.

Manufactured by the  
GURNEY HOT WATER HEATER CO.,  
237 FRANKLIN STREET, BOSTON, MASS.

JOHN A. FISH, Managing Director.  
SEND FOR PAMPHLET AND PRICE LIST.

SELLING AGENCIES.—M. H. Johnson, 140 Center Street, New York. Rhee & Whitacre Mfg. Co., 42 and 44 W. Monroe Street, Chicago (West and Southwest). T. R. Chase, 31 Edmund Place, Detroit, Mich. (for Michigan and Ohio). Wm. Gardiner & Co., Portland, Oregon.

## 10,000 ELECTROS.



Send for List of Catalogues.

## Ives' Putty Machine.

Patented Jan. 8, 1887.

The best device ever invented for laying putty. With this you can make old leaky sash perfectly tight without removing the glass. It will do the work of five men in half the time.

Sent by Express on receipt of price, \$3.00.

J. H. IVES, DANBURY, CONN.

## GREENHOUSE HEATING.

BY A. B. FOWLER.

Explains fully all the best systems of heating greenhouses by both hot water and low-pressure steam. Tells you the points to consider in selecting an apparatus. How to adjust same to various locations; gives the results of the latest scientific experiments. Shows how to compute the number of feet of pipe required for a given space; draft and other important matters.

It is highly commended by Mr. John Thorpe and others. Postpaid, 75c.

Sent on receipt of price. Address,  
AMERICAN FLORIST,  
CHICAGO.

## PIPE AND FITTINGS FURNISHED

— TO —

PLANS AND SPECIFICATIONS.  
Contracts solicited for  
HEATING GREENHOUSES.

Most improved plans.

ALL WORK GUARANTEED.

Prices furnished on application.

E. A. STIMSON &amp; CO.,

No. 22 and 24 Sears Street,

DAYTON, OHIO.

25c. In Postal Note, Silver or Stamps.  
SEE WHAT IT WILL BUY.

1 copy "How to Propagate and Grow Fruit," price 50c.; 1 copy "Pocket Chart of 40 Co-operative Associations," price 25c.; 3 copies back numbers *American* (Mich.) *Horticulturist* (different dates), price 10c. each. Total \$1.05, all for 25c. cts. postpaid. Address

LEAVENWORTH & BURR,  
R. 1. DETROIT, MICH.

Delegates to the next convention will travel via the

Pullman Car Line  
TO AND FROM  
Louisville, Indianapolis, Cincinnati and the winter resorts of Florida and the South. For full information address

MONON ROUTE  
E. O. McCormick, Gen. Passenger Ag't, Chicago.





## Index to Advertisers.

Advertising Rates, etc.	187
Allen, W. S.	187
Bancroft, J.	192
Bayersdorfer, M. M.	186
Beard, E. Jr.	185
Beniz, Albert	186
Berger, H. H. & Co.	186
Blanc, A.	186
Boydton, W. D.	182
Brackenridge & Co.	185
Brause, L. B.	184
Butz, Paul, & Sons	186
Carmody, J. J.	188
Cleveland, A. B. Co.	189
Cook, J.	186
Desmond, Wm.	185
Devine, Peter	187
Diez, John L. & Co.	184
Dillon, J. L.	187
Dreer, H. A.	189, 183, 185
Dundley, J. W. & Son	185
Elliott, B. A. Co.	184
Exeter Mach. Wks.	188
Faber, J. H.	188
Fassett, F. E. & Bro.	182
Fink & Co.	185
Fulweiler, P. C.	183
Gasser, J. M.	188
Giddings, A.	188
Goldman, M.	188
Griffith, Jas.	188
Growth, Henry J.	188
Gurney Heater Co.	188
Hales, H. W.	187
Halliday, Robt.	184
Hallcock, V. H. & Son	181
Hammond & Hunter	187
Hammond's Blue Shot	183
Harold, Thos. G.	181, 185
Henderson, P. & Co.	181
Herr, Albert N.	185
Hieble, Ad.	185
Higley, Henry G.	185
Hill & Co.	181
Hippard, E.	181
Hitchings & Co.	187
Hooker, H. M.	186
Hurd, Freeman	183
Ives, J. H.	186
Jewett, Z. K.	186
Kart, Geo. A.	183
Kaufmann, F.	181
Kirk, James	181
Krick, W. C.	184
La Roche & Stahl	187
Leavenworth & Burr	186

**ACHIMENES.**—The pots of these should by this time be laid on their sides under the bench that the soil may become quite dry and ripen the bulbs. They may remain in this position all winter.

**SYRINGA JAPONICA.**—Hallock & Son have a large number of tiny seedlings from Japan. This is more of a tree than a shrub, and so far as I know there are only three blooming plants of it in the east, namely, one at Prof. Sargent's, one at the Arnold Arboretum, and one at Amherst College. About two years ago it was figured and described in the *Gardener's Chronicle* by Prof. Sargent, and at that time had not then bloomed in Europe. It forms a handsome little tree with splendid foliage, which I have never known to mildew. Our specimen—a bushy-headed shapely tree, some nine feet high—has not yet bloomed. W. F.

**SOMETHING NEW**

—IN—  
**Heating Apparatus**  
—FOR—

**GREENHOUSES.**

Send for Illustrated Catalogue.

**J. D. CARMODY,**  
EVANSVILLE, IND.

**ATOMIZER & SPRINKLER**

FOR 1001 USES.  
PRICE 35 CENTS.  
POSTAGE 10 CENTS.  
SEND FOR CIRCULAR

**SELLS ON ITS Own Merits.**  
Spray appears like fog. Best sprinkler in the world. Sprinkles evenly. Excellent for window gardening, flowers & house plants. Moistens them as if by a fog, destroying insects. Fills instantly: its uses impossible to describe here. Enclose stamp for full pamphlet and price to agents. Remember, no stamp, no attention. **M. GOLDMUN, Patente, Pittsfield, Mass.**

## IMPROVED BOILERS

FOR HEATING

# GREENHOUSES

GRAPERIES, POULTRY-HOUSES, ETC.

ALSO FOR HEATING

WITH HOT WATER UNDER PRESSURE.

## VENTILATING APPARATUS

For Raising Sashes in Greenhouses.

### GALVANIZED SCREW EYES

And Wire for Trellis Work.

Send for Catalogue.

**Thos. W. Weathered,**  
46 & 48 MARION ST., N. Y.

Sectional View.

Mention American Florist.

## HEATING APPARATUS

FOR

# Greenhouses, Etc.

CAST IRON PIPE AND FITTINGS.

**JOHN A. SCOLLAY,**  
74 & 76 Myrtle Ave., Brooklyn, N. Y.

## Improved Hot Water Boilers

For Heating

# Greenhouses, Graperies, CONSERVATORIES, ETC.

ALSO

Cast Iron Pipe, Fittings, Valves and all Material for Heating by Hot Water.

Send for Catalogue.

## MYERS & CO.

1173 So. 9th St.,  
PHILADELPHIA.

## GREENHOUSE HEATING

BY STEAM, BY HOT WATER, BY COMBINATION STEAM AND WATER.

# EXETER MACHINE WORKS,

19 FEDERAL ST., BOSTON, MASS. WORKS-EXETER, N. H.

### THE CELEBRATED

## WILKS WATER HEATER!

For Heating

GREENHOUSES,  
DWELLINGS,  
POULTRY HOUSES,  
STORES, BATH TUBS,  
ETC., ETC.

Send for Price List.

**S. Wilks Mfg. Co.,**  
Cor. Monroe & Clinton Sts., Chicago

### J. M. GASSER'S

## PAT. ZINC JOINTS

For Butting Glass without Laps.

Makes it air and water tight. No breakage from frost. Saves fuel and glass.

FLOREST'S WATERMAN, for Flues and Hot Water, \$10.00 for Steam, \$20.00. It will ring a bell when the temperature changes, and ring when the steam goes down.

**J. M. GASSER.**  
71 Cleveland Avenue, CLEVELAND, OHIO.  
Mention American Florist

HOLIDAY NUMBER.

# THE AMERICAN FLORIST

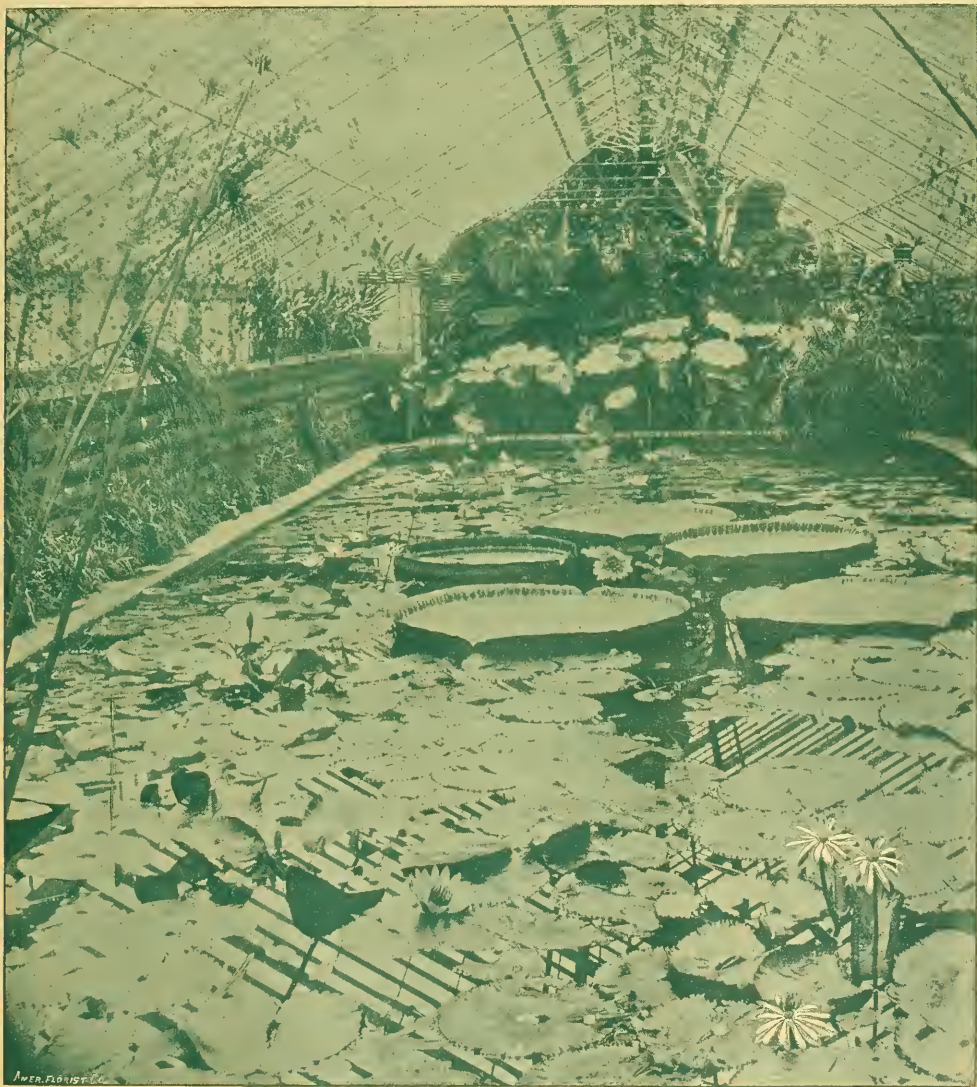


*America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."*

Vol. III.

CHICAGO AND NEW YORK, DECEMBER 15, 1887.

No. 57.



MR. W. S. KIMBALL'S AQUATIC HOUSE. ROCHESTER N. Y. VICTORIA REGIA IN CENTER.



## THE AMERICAN FLORIST

Copyright, 1887, by American Florist Company  
Entered as Second-class Mail matter.  
Published on the 1st and 15th of each month by  
THE AMERICAN FLORIST COMPANY.

GENERAL OFFICES, 54 La Salle Street, Chicago.  
EASTERN OFFICE,  
Room 81, Vanderbilt Building, New York.

All communications should be addressed to the  
general office at Chicago.

SOCIETY OF AMERICAN FLORISTS.—E. G. Hill, Richmond, Ind., president; John N. May, Summit, N. J., vice-president; M. A. Hunt, Terre Haute, Ind., treasurer; Wm. J. Stewart, 67 Bromfield street, Boston, Mass., secretary. The fourth annual meeting at New York, Aug. 17, 18, 19, 1888.

### Mr. W. S. Kimball's Aquatic House.

In accordance with your request, I send a little description of Mr. Kimball's aquatic house. The dimensions are as follows: House, 76 x 26 feet; water tank, 58 x 20 feet; height of house, 15 feet. So you will see there is not much space wasted on the sides for walks, and the lilies have an abundance of room to fully develop their large leaves.

At the lower end of the tank *Nelumbium speciosum* is planted; it is confined by a brick wall to keep it from spreading all over the pool. In the center is the grand *Victoria regia*, which has flowered several times this season and has been admired by thousands of people. Distributed about the tank are the best selection of nymphæas that can be grown; they include the following: *Nymphaea Zanzibarensis*, *N. Z. azurea*, *N. Z. rosea*, *N. dentata*, *N. rubra*, *N. coccinea*, *N. Sturtevantii*, *N. devoniensis* and others of the choicest varieties. Other things are grown in the water, such as *Cyperus alternifolius*, *Papyrus antiquorum*, which flourish magnificently.

To make a background at farther end of pool, there are planted in a bed of earth *Musa Cavendishii*, *M. coccinea*, *M. rubra* and *M. vittata*, their large leaves having a very good effect from the upper end. At the north end are planted hard wooded plants like *Allamandras* in variety and *Bougainvillea glabra*, which blooms profusely almost all the year round.

Besides being an aquatic house, it is very useful for orchids that require a nice, light, airy position. I have at the present time lots of *Lælia anceps*, *L. albida* and *L. autumnalis* hanging from the roof, which give the house a very much better appearance than the photograph shows it.

GEO. SAVAGE,

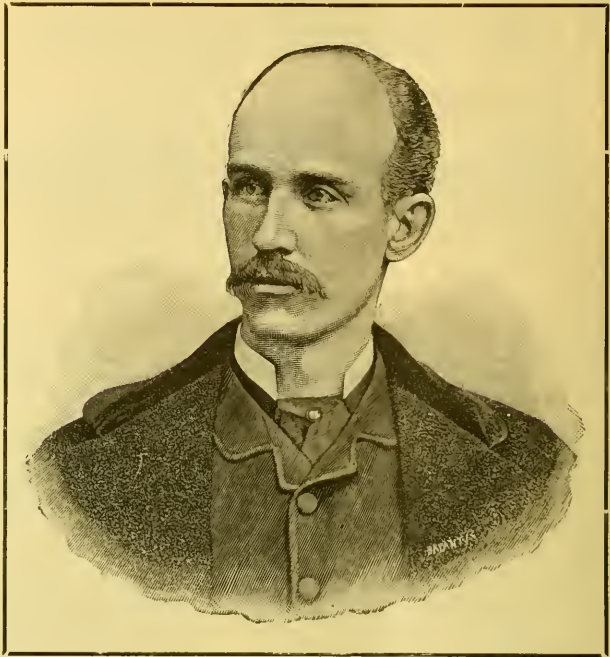
Gardener to Wm. S. Kimball, Esq.  
Rochester, N. Y.

### James Reid.

"Whom the gods love die early;  
But they whose hearts are dry as summer dust  
Burn to the socket."

James Reid, so well known as partner of Peter Henderson, and whose son-in-law he was, died in New York on Nov. 17, of typhoid fever, aged 36 years.

A friend in New York, who has known him well, writes: "James Reid was the youngest son of Andrew Reid, one of New York's best known florists of thirty years ago, and to whom many men of the craft to-day are indebted for their success in life for the kind words and substantial aid given to them in starting. James, his son, inherited his father's genial, kindly nature, and young as he was, has left not a few who will revere his memory from his helping hand in



JAMES REID.

time of need. While yet quite a youth James Reid was elected chief clerk of the board of public works of Jersey City, and before he was thirty years of age had been twice elected alderman, serving one year as president of the board, and in that capacity was sometimes acting mayor of Jersey City. At twenty-five he entered the seed firm of Peter Henderson & Co., and although he had no previous training for the business, yet in a few years, by his ability and close application, he so mastered its details that in less than ten years' experience his comprehensive knowledge of the seed business was perhaps unequalled in this country. Mr. Reid was a man of rare ability, of unwonted energy, and his great force of character made him a leader always. Few men in the trade were better known or more respected than James Reid, and his early death will be universally regretted."

"We have never met a man in the seed trade and rarely seen elsewhere one who equaled in brilliancy of intellect him who has just gone. It was a real pleasure to listen to his private conversation or public speech, and his thought and manner compelled the admiration of even his opponents. His brain and spirit were certainly cast in that rare mold of which it could be said

"This was a man."

for none who knew James Reid would deny that his genius was a credit to the business capacity of the human mind.

Mr. Reid was connected with the A. B. Cleveland Seed Co. at the time of his death, and though many of his personal friends regretted his withdrawal from the

firm he had so ably represented, yet no man could say but that his career had only just begun.

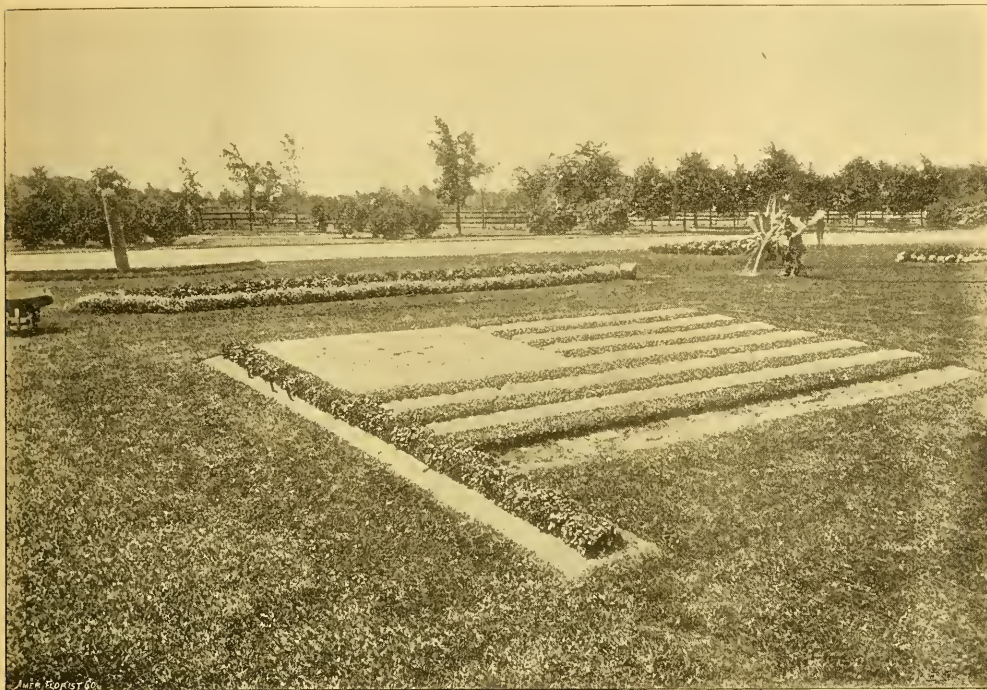
[President William Meggat writes:]

James Reid was in his 37th year, was born in New York city. Both his parents were Scotch. His mother, a very fine old lady, is still living in Jersey City; his father, Andrew Reid, was a florist in Fourteenth street, New York—one of the old type of Scotch gardeners, a man who was loved by every one who knew him. James learned his father's business and followed it for a number of years. After his father's death the family moved over to Jersey City to live, where they owned considerable property, now occupied by James' brother, John Reid, florist.

James became considerably interested in politics, and was for several years connected with the board of public works in Jersey City, was elected alderman several times, and was quite a while chairman of the board of aldermen. But previous to this he had married Peter Henderson's only daughter, and connected himself with the firm of Peter Henderson & Co. His early training had most eminently fitted him for the position he occupied there, and very soon he developed into one of the best seedsmen in the country.

He was naturally a very brainy, bright, quick man, sharp and keen in a bargain, but his whole nature was bright generous and big-hearted. Every one who knew him admired him, and feel now as if the seed trade had lost one of its brightest stars and a personal friend. "Poor Jim." He leaves a widow and one daughter.

WILLIAM MEGGAT.



THE NATIONAL COLORS; SOUTH PARK, CHICAGO.

#### Chicago Parks.

Our view in this issue shows a bed planted the past summer at South Park and which faithfully represented the stars and stripes as though laid out upon the green lawn. The red stripes were of *Alternanthera paronychioides* major and the white of variegated sweet alyssum. A large star of *echeverias* occupied the center of the field of crushed blue stone and it was surrounded by twelve smaller stars of the same. The staff was *Alternanthera aurea* nana crossed diagonally at regular intervals with *A. versicolor* to give the appearance of a yellow staff wound with red bunting. While undoubtedly stiff in outline the bed was quite attractive and aroused the patriotism of all visitors.

#### Water Lilies for Winter Bloom.

Nymphæas that have been at rest for a couple of months, or partly so, may be brought into flower in a month or two by giving them a warm corner in the house or setting the pans on the hot water pipes; if repotted into fresh soil, moderately rich, so much the better. The best sorts for forcing in this way are *N. cœrulea*, *N. Zanzibarensis* azurea, and for a pink one, *N. Zan. rosea*; these sorts come quickest into bloom. Other kinds may be forced, but do not so well repay the trouble and room at this season. My method is to start a lot of young plants

about September, and they continue to bloom nearly all winter. Any one having a tank in the greenhouse with hot water pipes running through it may flower them freely by giving a little increase of heat to warm the water to about 70°; a temperature of 60° will do for the house.

BENJ. GREY.

#### *Euonymus Sieboldianus*.

This is a hardy shrub, but one of the most beautiful of all garden plants. In the north it is deciduous, in the south evergreen. But even here it holds its leaves bright and green till January. It is a vigorous grower and forms dense hemispherical bushes; ours, comparatively young, are six feet high and eight feet across. Its foliage is deep glossy green, quite as pretty as that of the evergreen *E. japonicus*, and without being so stiff. It comes into bloom about the first of September, when the bushes are loaded down from the ground up with showy (for a *euonymus*) greenish white flowers. But its grandest beauty is developed in November, when the fruit ripens and displays itself in just as great profusion as the flowers appeared a couple of months before. The "berries" are orange-colored and the pods whitish. The little spray herewith sent was cut to-day (Dec. 5), and after having passed through a very frosty week; we had 23° of frost on the morning of Dec. 1. It has never been protected in any way. Given a

little protection in December, wouldn't it be a handsome plant for Christmas decorations?

W. F.

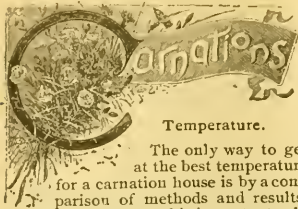
Long Island.

[The sprays sent were very handsome, and would in our judgment be a grand addition to our Christmas decorations, in which more variety is needed.—ED.]

LET NOT the holiday rush cause you to forget, but rather to remember that Jan. 1 brings the New Year, when one, two or three new subscriptions would be a proper holiday reminder to the AMERICAN FLORIST that you think the 24-page illustrated semi-monthly is really worth double the dollar we charge. We can always use some of that "surplus," and we want every gardener and florist in the Union. A merry Christmas to all!

AT THE SPRING EXHIBITION of the Mass. Hort. society special prizes, consisting of two gold medals, three silver gilt medals, three silver medals and one bronze medal, are offered by the "Royal Union of Holland for the Promotion of the Cultivation of Bulbs" for best fifty named hyacinths in bloom; best twenty-five pots of single early tulips, three bulbs in a pot; and best twenty pots of *Polyanthus Narcissus*, three bulbs of the same variety in a pot, not more than two pots of one variety. In addition the society offers its usual premium list for spring bulbs, amounting to \$315. The exhibition will be held about March 21.





### Temperature.

The only way to get at the best temperature for a carnation house is by a comparison of methods and results. As a contribution to this important subject, the practice of some eastern growers may be interesting.

The idea is to imitate nature as closely as possible. The autumn months seem to be the most favorable to growth in the field. At this season the days are warm, often hot, the high temperature extending well into the night and followed by a rapid fall toward morning, the thermometer often showing 40° or lower. At sunrise the heat increases rapidly, so that we have sixteen or eighteen hours of good growing weather out of the twenty-four. We imitate these conditions under glass during the cold months by starting up the fires early in the afternoon and closing the ventilators soon enough to prevent the temperature falling much as the sun goes down, trying to have 60° to 65° at the time the fires are banked for the night. The temperature often falls slowly till it reaches 40° or even lower, but this low temperature continues for a very short time only, the fires being started up early enough to get the house up to 50° or 55° by daylight. By the time the sun fairly strikes the glass we have 65° to 70°, and a little air can be given.

This treatment gives the plants about as many growing hours each day as they would get in the field during September, and the conditions as to temperature are about the same; plenty of heat from sunrise till midnight, with two or three hours of quite low temperature in the morning, and plenty of air. The results from this method are very good, the flowers nearly all arrive during the winter and early spring months, leaving but few for the summer months when prices are low.

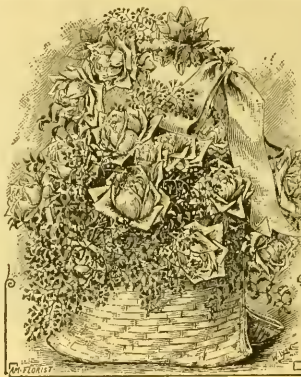
It seems to me a great mistake to "grow carnations cool," as it is called, which frequently means turning the houses into cold frames during the night and often during the day. L. W.

### How I Heat a Carnation House.

Having added, like many other florists, another greenhouse to my plant this fall, I concluded to heat it after my own plan, which from present appearances is the best arrangement which I have yet seen. Living in the compact part of the city, I had to locate my house upon a side hill lot with a fall of about seven feet in seventy. In order to have the house built on the level it gave me at the north end a basement some six feet in the clear. The greenhouse is 20x70 feet, basement 20x10, which gives me a nice place for coal and also plenty of room to attend to the boiler, which is a Hitchings No. 4 Saddle, set with the front flush with the back wall of the basement, the boiler extending into the greenhouse and connecting with a flue, which has a good rise at the start, and continuing until it reaches the south end, where it enters the chimney. Some florists are afraid of flues, but I am not if they are well built, and in connection with a boiler they will

last many years and do at least one-fourth of the heating of a 20-foot house.

What I wish to call to the attention of florists is the arrangement of my water pipes. My boiler is located on the west side of the house, with the top two feet below the line of the ground floor. In piping the house I commenced at the boiler and raised up two feet, then eastward eight feet to the middle of the house, which is a span roof running north and south, with a center bed nine feet wide. After the pipe reaches the center of the house it raises eight feet, which brings it about six feet above the center bed. The pipe to this point is 3 inch wrought iron. From this point 2-inch wrought iron pipe is used, branching right and left twenty-two inches each way, making the arms of the flow pipes forty-four inches apart and two feet below the glass, running along below the glass to the further end of the house.



McCONNELL'S BASKET.

Here the pipe drops down each side of the door and passes under the side benches, the one on the east side having two return pipes, and the one on the west only one return, running along near the flue. Over the eight-foot rise in the center of the house, where the pipe branches off to the right and left, I carry up a 2-inch pipe some eighteen inches, with a water gauge attached; this pipe runs up to the expansion tank, which is made from 5-inch pipe six feet long, with safety valve attached, so I can use the water under pressure if it becomes necessary. The piping is arranged on the down-hill plan from the point where the branches right and left. By this arrangement and the use of 2-inch wrought iron pipe the house is heated up very rapidly—quicker than steam—and you can bring the water up to the steam point if you want to do so.

The advantage which I claim for it is that the hottest pipes are placed above the plants, thus heating the top of the house first and in a great measure doing away with the rush of heat from under benches up through the plants to fill the top of the house before the lower part will be warmed. All florists know that this scorching heat under the plants is a prolific cause of red spider. Other advantages are, the boiler is not expensive and any mechanic can place it in position, the piping is cheap and easily arranged by any local pipe fitter. By the use of a boiler in connection with a flue

nearly all the heat is used, instead of being sent up the chimney to warm the air outside of the house. Large growers in the future will no doubt use steam, from the economy in labor, but I think that within ten years we will find many of our large establishments which are heated by steam with their pipes running above instead of under their plants.

The Creator gives us light and heat from above; He has also placed the pores of the leaves on the under side, no doubt to protect them from the scorching heat and drenching rain. Can we do better than study nature's laws and be governed by them? E. HOLLEY.

Hudson, N. Y.

### Is a Dormant Period Necessary?

In the issue of Nov. 15, Mr. Lamborn contends that to obtain the best results with carnations, a dormant period during growth of the plant, is necessary.

While never having tried the affirmative of this proposition, the negative has given results so satisfactory that the necessity stated seems to me hardly to exist. The crop of bloom I have obtained by following the "usual way" has been such that I do not believe any other treatment could increase it. I have the old DeGraw, force it regularly and have no trouble with disease. My soil is a very sandy loam. My stock of young plants is propagated from the forced plants, and the vigor of the plants I have never seen equaled. For my use I have found nothing to equal the DeGraw. I hope to hear from other growers as regards the dormant period.

Michigan.

L. L. BLAIR.

### Deep Planting.

I notice that deep planting is considered by many of the carnation growers, as the cause of the carnation disease; and that the remedy lies in carefully planting them both in the field, and afterwards in the houses, so that the soil is neither above nor below that portion of the stem exposed in the pots or boxes before planting out. This easily managed remedy would be as agreeable a one to me as to any other grower, but an incident of last summer shakes my faith in it considerably.

A few weeks after I had planted out my carnations, we had a very heavy rain storm which washed the soil around one hundred or more of my DeGraws so that only a small portion of the top was exposed. In this condition they were left all summer, and when taken in, this lot was planted together at one end of the bed to observe the effect of this uncalculated deep planting. To this time I have not been able to detect any sign of weakness or disease.

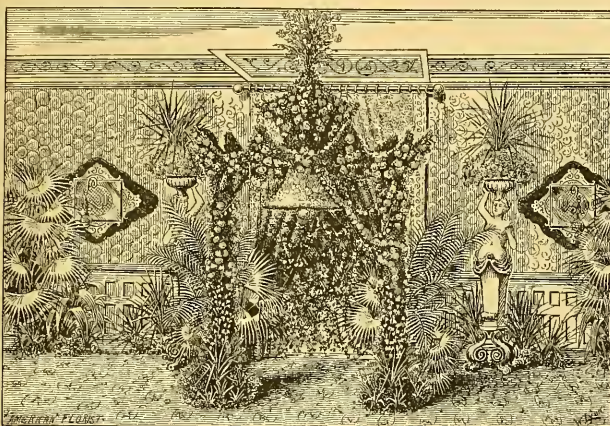
I do not write this to encourage careless planting, for I consider it necessary to exercise all the care possible in our somewhat unnatural treatment of the carnation. This carnation disease should receive as much attention from growers of carnations as the black spot among rose growers, so that we may get at the cause and by removing it obtain a remedy for the disease.

Lancaster, Pa.

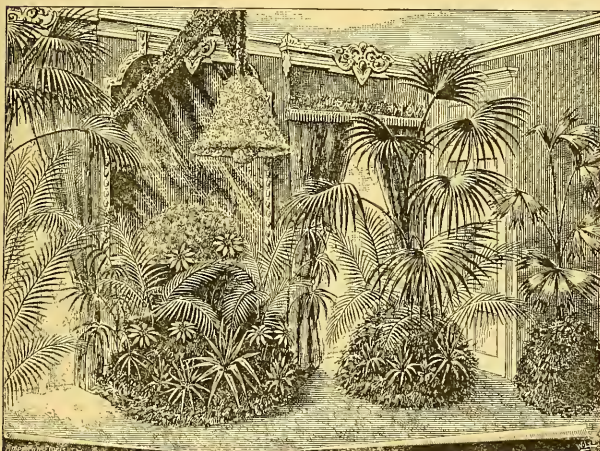
ALBERT M. HERR.

CARNATION MISS JOLIFFE.—This is a very popular variety with English growers, and is now the variety most extensively grown by them as a market plant, as well as for cut bloom. In color it is a soft, delicate shade of pink.





ARRANGED BY KLUNDER.



ARRANGED BY THORLEY.

## WEDDING DECORATIONS.

**HINZE'S WHITE.**—J. H. French of Stoughton, Mass., writes that he has found this a good winter carnation as well as a prolific variety for summer blooming.

**SEEDLING CARNATIONS.**—Mr. E. E. Conrad, Salem, O., sends us specimen blooms of three seedlings which he has named Pauline W. Holme, Mary E. Hill and Thos. Meehan. The first named is pink, the second salmon and the last a dark maroon shaded with scarlet. Mr. C. states that they were grown from a strain of seed originated by himself.

**POT PLANTS.**—Mr. Henry Bauer of Baltimore, has the finest lot of pot grown carnations that I have ever seen; they are all in 5-inch and 6-inch pots, and when I saw them lately they were literally covered with bloom. Mr. Bauer

considers Buttercup a particularly good variety for pot culture, in fact all his carnations are grown in pots; he is satisfied that as good crops are obtained as if grown on benches, with the additional advantage that the plants are always in the best possible shape for retailing.

A. W. M.

**NEW CARNATIONS.**—Mr. Wm. Swayne, Kennett Square, Pa., sends us several blooms of his new carnations, L. L. Lamborn and Wm. Swayne. The flowers sent are the handsomest white carnations we have seen for a long time. The blooms of the first named all measure over two and a half inches in diameter, are full and fragrant, and in color a pure white; the latter are nearly as large and very full, but not of as clear a color. None of the flowers had burst the calyx,

and the stems were well set with buds. They certainly promise well.

**PROPAGATING.**—Carnations from which cuttings are to be taken for next season's stock should never be forced; if this is unavoidable, the cuttings should be taken off before any amount of forcing is done; the cuttings will root quicker, and develop better plants than if taken from plants forced for cut flowers. Plant the rooted cuttings about two inches apart in shallow boxes, where they can remain until planted out in spring; by a little care they can be removed from the boxes with as good balls as those grown in pots. It is well however when working off the cuttings to pot a few of each variety for retail trade in the spring. Shift into 4-inch pots about January and they make very salable stock.

A. W. M.

## Wedding Decorations.

The first illustration shows a decoration arranged by Klunder at the Hoffman House, New York. At the end of the parlor was a large mirror with heavy curtains. Vines almost concealed the lower part of the mirror, while directly in front was the wedding bower, composed of ivy, smilax and asparagus, with bunches and strings of roses, gladioli and orchids. Gladioli and lilies were on top. The bell hanging from the center of the bower was composed of white and pink roses, and the bell-rope of small white roses. At the base were ferns, gladioli and palms, while palms in variety formed the background.

The second illustration is that of a decoration by Thorley. The bower was formed of plant and flower pyramids, which were placed around a spacious mirror. An elaborate bell was swung by a rope of foliage, and from the ceiling where the bell was suspended chains of asparagus vines were drawn down fancifully along the sides of the mirror. A bed of bloom was made at the base of the glass. This was a unique and easily formed bower, without the confined effect of a canopy.

## McConnell's New Basket.

This is one of the fashionable souvenirs of the season. It is composed of white enameled straw and bound with bullion cord around the edges. Particular attention is directed to the bottom edges of the basket, which are fashioned in a novel and graceful way.

**RECORD OF WORK DONE.**—This is a good time to commence a diary of work done in the greenhouses and around the place. You will find such a diary of immense benefit for reference the year following. How many times you have scratched your head partially bald trying to remember the exact date you started certain stock last year, and which came in a little too early, or a little too late. Again, as a reminder of work to be done, and which might otherwise be accidentally overlooked, the value of such a diary cannot be overestimated. Fifty cents will buy a suitable diary, and when once the habit is formed it is easy to keep it up. Don't wait! Commence now!

**STEPHANOTIS FLORIBUNDA.**—Will this flower freely if planted out in a warm corner of a rose house? Should it be planted on the bench or in a solid bed? Is shading required? H.





Black Spot.

This disease appears to be very troublesome in many places this season (judging from the many inquiries regarding it), and it is not much to be wondered at, considering that the season has been particularly favorable to its growth.

From tests which I have several times made, I am convinced that a cool, moist temperature, with a little extra moisture at the roots of the plants, will at any time produce it, even on healthy plants, particularly the hybrid tea class, and the past two months have been unusually suitable to producing such a state of things in greenhouses generally. Comparatively cool nights during September, without being quite cold enough to require fire heat, all the early part of October the same, in conjunction with a considerable amount of cloudy weather, created just the conditions conducive to fungoid growth. The best means of checking this disease which I have found yet is a healthy, dry atmosphere at night during the fall and early winter months, with a night temperature never below 56°-60° is better—till the weather gets cool enough to need strong fires. After that 56° to 58° will do no harm whatever, and for all the true tea varieties it is much better to let the temperature drop to that during cool early mornings. The Bennett will, however, evidently stand a little more heat than teas, and to keep it free of spot it should be kept a little warmer at all times. The real cause of black spot seems to be a disputed question yet with many, some contending that it first affects the plants through the leaves; others again contend that it is first caused by loss of root action; but as far as I have been able to investigate, there are no two cases exactly alike, so that it is very hard to determine which is the primary cause of the trouble in all cases—whether loss of root action or atmospheric influences on the foliage. But any one watching carefully the temperatures of the greenhouse and the conditions of the soil under all circumstances, cannot fail to observe that if the soil at the roots is a little on the side of too moist for healthy root action, and then let the temperature fall ever so little below temperate, how quickly the roses will show indications of this disease—more particularly if the land on which the greenhouse stands is not well drained. On the other hand, if the soil at the roots of the plants is comparatively dry, and plenty of air is given at all times when favorable, and the temperature falls as low during the night as in the other case, it will scarcely show any effect on the leaves at all if the surrounding conditions are comparatively dry also. Pure fresh air is also a good medicine for this disease, and by attending carefully to the ventilators during all possible favorable weather, it very materially helps to keep the roses healthy.

The vegetable and animal kingdoms are very nearly allied in this matter, as in many others. Take a man who is working in the open air and often on the

damp ground all the year round, and let him get his feet wet, it scarcely affects him; but let the man who is not accustomed to it get a soaking and go with wet feet for several hours, and the chances are about ninety-nine to one that a very severe cold, with a sore throat and very likely diphtheria or a kindred disease, will quickly overtake him. A rose growing in the open air the whole season can get a soaking rain and have the soil wet at its roots with a cool atmosphere surrounding it, and not be harmed; but treat a plant brought up in a greenhouse in the same way artificially, and that poor plant would suffer. And yet how often do we subject them during the fall to these identical conditions, and then wonder why they got sickly.

The disease which often affects roses during fall and spring by turning the young wood almost black and causing all the young leaves to drop off (of which several articles have appeared in your paper at different times) is nothing more or less than a very aggravated case of this kind, and very nearly allied to black spot.

JOHN N. MAY.

#### Black Mildew on Roses.

Black mildew has played havoc with several of our rose men around Philadelphia. Some of them call it a chill (which of course it is) but it is nothing more or less than black mildew. It is caused by too much moisture, too cold a temperature or too much water. The leaves will commence to drop off from the very top, and if it is not checked it will strip every leaf from the plants.

About the 1st of October we were very busy getting our chrysanthemum house ready for the plants before frost, and at that time there was a leak in one of the water pipes, consequently the walk in one greenhouse was flooded with water for several days and nights with no fire heat. We were very particular to syringe only on bright sunny mornings, but where we had some young pot roses that were very close together, this black mildew made its appearance, and before we could stop it, it ran pretty well over the house. The other rose house that was alongside of this, had the same treatment in regard to syringing and firing and has not been affected. So I claim it is too much cold moisture that is the cause of it.

I am pretty confident if a house is kept dry this disease will never be seen no matter if the temperature falls to 40° every night. If low temperature were the cause I am pretty sure I should have been struck pretty bad with it a year ago, when through a difficulty in heating, my houses often went down to 35° after the middle of November, but we did not have a sign of the disease. The best preventative is to paint the hot water or steam pipes with soot and sulphur, and keep the houses dry as possible for a few days. This disease often appears after firing has been dispensed with and a few cold cloudy days follow.

W. W. COLES.

#### American Beauty.

In reading Mr. R. S. Brown's note on American Beauty, on page 156, I cannot but make a few remarks. I am glad to hear such good testimony of the Beauty as an out-door rose; such notes are very valuable to us all. I am inclined to think that perhaps the rather unfavorable shade of color in the Beauty out of doors is due to lightness of soil, and also perhaps full exposure to the hot sun, just the same as Brother A. W. M. remarks

about Mr. Cook's experience with Sunset, for it is a well known fact that almost any rose will give and hold a better color in summer if grown in a heavy, cool soil and partly shaded by trees or shrubbery at a short distance.

I am sorry to hear, however, that Brother B.'s Beauties have made all growth and no blooms. Under glass this has been a frequent complaint among rose growers. My experience teaches me that in order to get the most blooms, this rose should be gotten into and kept in a bench-bond condition. Four inches of soil on benches for the Beauty is ample. I have a house planted on shallow benches; this is their second season in but four inches of soil. During the summer they were almost starved; in fact, we lost a few. When the time came for starting them, we simply scraped out such of the old soil as we could between the rows, and put in fresh soil prepared in the usual way, with some fine bone mixed through it; then started them gradually, giving them a gradual supply of water and growing atmosphere; and though some who saw them pronounced them as not much good, we are and have been cutting the finest flowers out of this house, and plenty of them as perfect as they can be, with long, strong stems—we have scarcely any blind shoots. Crowding the roots and feeding them will give you plenty of flowers and keep your roses healthy.

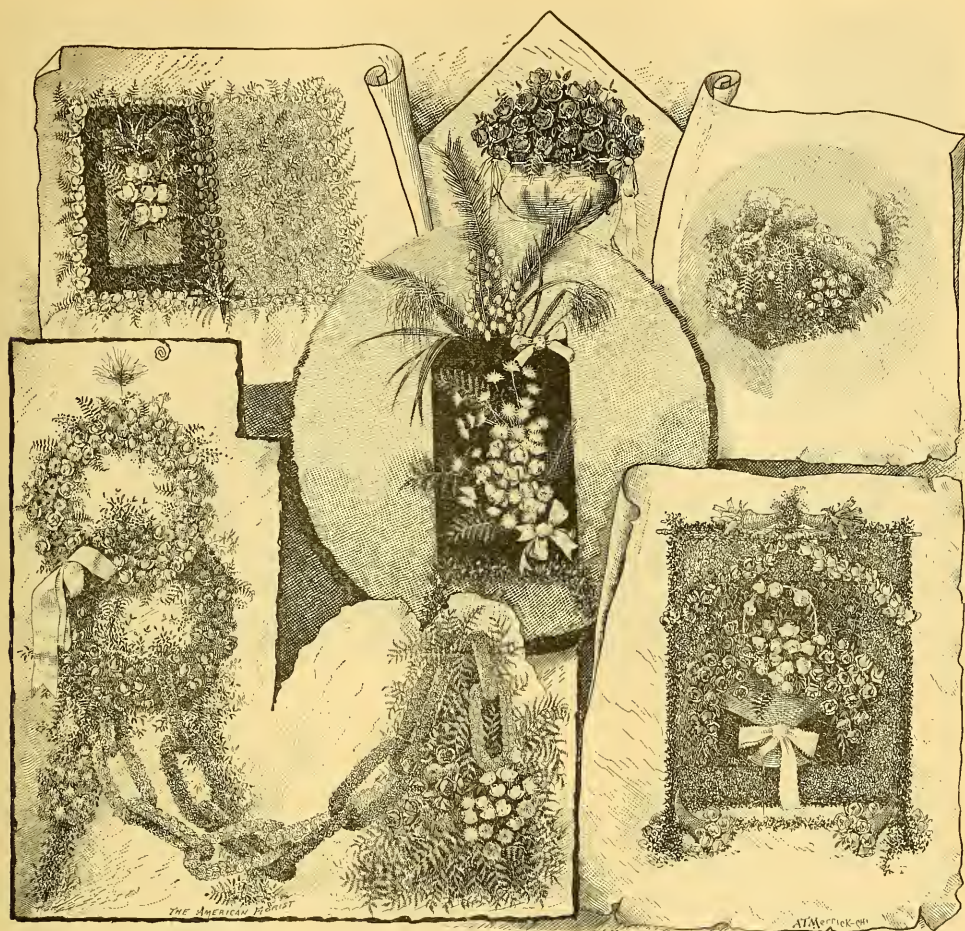
H. A. S.  
Rose Hill, New Rochelle, N. Y.

#### Rose Reminders.

As the season is close at hand when roses are in greater demand than at any other season of the year, the temptation is great to put on a little extra fire heat to push open a few more buds, with the idea that these are so much clear gain; but the growers who do this will find that it results in a loss on the total receipts at the end of the season. In these days of sharp competition it is not quantity that tells—it is quality that counts every time—and where the temperature is increased very much, if only for a short time, the effect on the whole crop is very marked for a long time, even if it does no other damage; but in many cases I have seen it ruin the whole stock of plants for the season. From my own experience I would very much rather take only what the plants will produce under reasonable treatment than give them an unreasonable treatment for the sake of getting a few more dollars out of the plants just at the holidays, for in the first place I find I can get a much more steady crop by not resorting to any undue forcing, and I find the total receipts larger at the end of the season; in the second place I do not wish to run the risk of killing my plants by any unreasonable treatment.

As cloudy, dark weather is very apt to prevail at this season, care should be used not to get the soil about the roots too wet at any time for the next six or eight weeks; the result might be disastrous to the crop of blooms then on. Keep the soil in a healthy state at all times by cleaning off all dead and decaying leaves, and rubbing the surface of the bed over occasionally with the hands to prevent the growth of that green fungus. Do not use a rake or anything that will break the soil up, as that would destroy the young fibrous roots near the surface. Give all the air possible on bright days, so as to keep a healthy, sweet atmosphere in the houses at all times.

M.



FLORAL DESIGNS AT THE CHICAGO SHOW.

DECAYING ROSEBUDS.—Will some of our veteran rose growers please tell me why my Niphetos buds come discolored in the center? The outer petals are perfect, but as the bud expands there are decayed-looking petals at or near the center of the flower, which makes it entirely worthless. This is especially noticeable in large flowers; have never seen it in buds below the medium in size. J. P.

#### Floral Designs at the Chicago Show.

Our illustration shows a number of sketches made at the recent Chicago flower show. The design in the upper left hand corner represented an open book, and was arranged by M. F. Gallagher. Other funeral designs sketched are the panel in center, arranged by F. Whitnall & Co. of Milwaukee, and an anchor and rock shown in upper right hand corner, arranged by F. F. Bentley. The panel in center was of black velvet; the flowers at top were a spike of yucca,

with a stalk of cyperus at each corner. The other flowers used in the pieces named may be recognized in the engraving.

The wedding design shown in the lower left hand corner was decidedly original; it was arranged by F. Whitnall & Co. The panel sketched in lower right hand corner shows one side of the wedding design shown by M. F. Gallagher, and which was awarded first premium for wedding designs. The body of the panel was made of fronds of *Adiantum gracilimum*, and the basket of choice roses contrasted richly with the delicate green of the ferns. The two small cornucopias at the top were filled with handsome *lapageria* blossoms—one holding rosea and the other alba. The sketch does not do justice to the piece, which was richly made. The silver bowl of *Am. Beauty* roses shown in sketch at top of illustration occupied the center of a dinner table decoration arranged by Chas. Reissig. The ribbon at the sides

was of a very light shade of salmon. The roses were all specimen blooms, and the whole made an exceedingly rich appearing center piece.

#### After the Wholesalers who Sell at Retail.

ED. AM. FLORIST:—At the annual convention of this society the secretary was instructed to ask you to print the following officially in your valuable paper:

*Resolved*, That the Society of Indiana Florists most emphatically protest against the practice of certain wholesale firms who sell plants to retail parties at wholesale prices.

*Resolved*, That it is inimical and an injury to the florists of this state who do a legitimate retail business, and further that we as individual members of the Society of Indiana Florists refuse to buy from or in any way countenance firms who thus violate faith with legitimate trade.

*Resolved*, That a copy of these resolutions be sent to the AMERICAN FLORIST for publication in its columns. WM. C. BERTERMANN, Sec'y.  
J. D. CARMODY, Pres't  
Indianapolis, Nov. 10, 1887.





Cypripedium Spicerianum.

This grand species is among the earliest of the winter blooming section of this extensive family. Coming into flower with the early batch of insignies, it lasts fully two months in perfection, and the flowering season may be prolonged by taking them to the cool house. We have quite a lot of this species in full flower just now, some of the plants bearing more than two dozen scapes, and many of these having twin flowers. This freak is very common among the cypripeds this season, even among some seedlings which are flowering for the first time. Spicerianum does remarkably well among the general collection, which, by the way, we keep hotter than is usually recommended. In potting, the pots should be half filled with potsherds to insure thorough drainage, as it is a great water loving kind. The potting material we prefer is a mixture of equal parts peat and sphagnum, though it does well in sandy peat and sphagnum alone. To grow it successfully, give it abundance of water, thorough drainage, the warmest house, and do not over-pot it.

C. Spicerianum is a native of the Philippine Isles, and was discovered in 1878. Though but very few plants were sent to England, where they fetched a very high price (one of these plants is in flower with us now and is more than two feet through), since then large importations have brought it within the reach of all; but if it is true that no more are to be found in its native home, it will never become very common unless large quantities can be raised from seed. We have a lot of plants in flower from seed sown in 1886; some of these are bearing four to five blooms and have five and six leads. Among the many varieties of this species are magnificum, with the dorsal sepal broad and almost entirely white; nigriscens has the petals and labellum very much darker than the type, rendering it a very striking variety.

F. GOLDRING.

## Dendrobium Wardianum.

The earliest batch of this grand orchid will shortly be in flower, and by judicious treatment, flowers may be had from now until next May. Some of the later ones will only just have finished their growths while the early ones have been in the resting house since July. In bringing this species from the cool house to force care must be taken that the buds are well broken through the skin, and that they are not subjected to extreme heat at first or many of the buds will surely blight.

Though this species is one of the easiest of orchids to grow, it is often seen in bad condition, and good well-grown plants are more the exception than the rule. It is a native of Assam in the East Indies where for six months of the year heavy rains fall constantly and the temperature is very high. It is under these conditions that the immense bulbs are formed which we see on imported plants, and we should try to imitate them

as nearly as possible in cultivation. Pots or baskets may be used, and these should be as small as possible and well drained. The potting material may consist of equal parts peat and moss. The house must not be shaded too heavy—but only sufficient to keep the sun from burning the leaves. After the growths are thoroughly matured the plants should be removed to a dry, airy house to ripen, by gradually withholding water. After the leaves are all off, only sufficient water should be given to keep the bulbs from shriveling. If any plant should get into a bad condition, a good plan is to cut the bulbs, and half bury them in damp moss. This will cause the dormant eyes to break into growths. These making better plants in a shorter time than it will take the old plant to "pick up." The practice of cutting the bulbs with the flowers I think is hurtful, and if persisted in will ultimately kill the plant.



HANDLING LARGE PLANTS

Among the many varieties of this fine species is Lowii. This is a great improvement on the type, with flowers of an immense size and brilliantly colored—consequently nearly all imported plants are sold under this name. Ochroleuca, a variety in which the whole flower is suffused with the color of ochre, the petals not having the usual crimson tips. This is a very distinct and rare variety. Albida, as its name implies, is white with exception of a blotch of yellow on the lip.

F. GOLDRING.

## Orchids Now in Bloom.

There are now in bloom quite a number of fine varieties well adapted for cut flower work. Laelia anceps and autumnalis, with beautiful long spikes with from two to seven flowers on each spray, from a delicate rose and pink to a deep crimson and plum-purple shade. Oncidium varicosum, the golden butterfly orchid, with graceful, wavy, long sprays of from eight to thirty blossoms. Oncidium crispum and Forbesii, with their rich sprays of chocolate blooms with orange yellow blotches, besides several other very showy oncidiums. Lycaste Skinnerii, with rich, fleshy and bold blooms of good size and long stems; very showy in either bouquets or table designs. Cattleya Eldorado splendens and Cattleya Percivalliana are coming in in

abundance; their rich lustre of colors are almost indescribable. Cypripedium such as Spicerianum, Pardinum and Harisium, as well as old but staple insignie are all in good showing. Angrecum Leonii, with its chaste, pure white and deliciously fragrant flowers of curious shape, and lasting two months in perfection. Several vandas, especially V. coccinea, with glorious racemes of that heavenly blue which is hard to describe. Zygopetalum Mackayii, also of a blue cast, with shield-like lips, streaked with rosy white lines; very sweet-scented. Laelia Jerrinii, also very fine. Several odontogloss, especially the rich and full O. Insleyii leopardinum. Of calanthes some four varieties, all with long spikes of from twelve to twenty-four inches, covered with beautiful blossoms. Laelia albida, almost a pure white, save a little delicate rosy purple throat; and also in long sprays. Oncidium ornithorhynchum is not to be forgotten, with its graceful long sprays covered with pink miniature butterflies. These and quite a few other varieties supply the great increasing demand for orchid blooms at this season, with scores of other varieties to follow. H. A. S.

New Rochelle, N. Y.

## Handling Large Plants.

Where plants are so large that they have to be planted in tubs, it is difficult to move them without injury if handled in the usual way, and as these large specimens are always the most effective in a plant decoration, any method by which they may be handled more easily and the danger of injury lessened, is of value. As a step in this direction we present a sketch herewith showing the manner in which Mr. J. T. Anthony, a Chicago florist, who has a considerable call for plant decorations, handles his large plants.

The handle bars, as shown, fit into irons screwed to the tub. When the plant is to be carried on a level surface the lower edge of the handle bars is used, but when going up steps or stairs the bars are used in the position shown in sketch. This keeps the plant more nearly in an upright position and considerably equalizes the weight when being carried up the steps. The bars allow the two carriers to keep at a distance from the plant, and the danger of injury is thereby lessened. A peg is placed on the block just back of where the iron rests upon it, to prevent the tub from slipping back. This matter is certainly worthy the consideration of those who have to frequently handle their heavy specimen plants.

## Fancy Bedding.

The accompanying cut represents a bed at the grounds of the state lunatic asylum, Danvers, Mass. Danvers is situated on the Boston & Main railroad about twenty miles from Boston. The asylum buildings are very extensive, and are located on a hill commanding a magnificent view in all directions. On a spacious lawn in front of the main buildings are a number of fine flower beds, the most elaborate of which is the one here represented.

The ground plan of this bed is a circle twenty-three feet in diameter. The extreme height to top of the dome is seventeen feet; the dome itself measuring nearly nine feet in height. An archway underneath (not shown in picture) is about seven feet high. In addition to the two jets shown in the picture there is also a fountain and basin in the center of the dome. The material used in the make-



FANCY BEDDING AT DANVERS, MASS

up of this magnificent piece of work is the same as is generally used for such beds, viz.: Several varieties of alternanthera, Echeveria metallica and secunda glauca, Oxalis tropaeoloides, santolina, sedums, etc. Around the opening of the archway an entirely different class of plants is used, however, such as nasturtiums, lobelias, alyssum, etc., making a most beautiful contrast with the formal lines of the rest of the design. The interior of the archway is covered with English ivy and Mitchella repens. The calendar which is seen on the front of the bed is made in the usual manner with such designs; the plants composing the letters being set in boxes, and these boxes changed daily to correspond with the day of the week and month.

Mr. Ettore Tassinari the gardener who designed the bed is an Italian by birth. He came to this country eleven years ago to work at his trade as a mason, and was employed for two years on the erection of the asylum buildings. Showing a natural aptitude for gardening work he was given a job assisting to lay out the grounds, and in the following year was given entire charge, and has now been there eight years. He raises all his plants himself in a small greenhouse on the grounds, and every plant in the bed above described was set by his own hands.

W. J. S.

LINUM TRIGYNUM—one of the brightest and most showy of yellow-flowering cool greenhouse plants, but like all other flaxes, of no use for cutting. Now in season.

#### Notes and Comments.

The application of salt as a top dressing to smilax, of which Mr. Falconer speaks in the last issue of the *FLORIST*, should not injure the crop if judiciously applied. A heavy dressing when the plants are just starting would naturally kill insects and smilax too. But when the smilax is well grown, almost ready for cutting, a light dressing of salt not only kills weeds; it also hardens the foliage to a very considerable extent, and thus keeps it in perfect condition much longer than usual. This is a very useful wrinkle around holiday time, or at Easter, when a grower wants to hold back his crop. But the salt must not be thrown on recklessly; it must be applied with brains, or annoying results will follow.

All the indications point to a very busy winter for the florists; the business outlook is very good. But the beginning of December saw a decided dearth of flowers. The chrysanthemum crop vanished in a twinkling, and the few stragglers left brought better prices almost than in the beginning of the season. Moral: Find room for a few good late flowering sorts; they will prove very useful. There seemed to be comparatively few late flowering yellow sorts in the market; there were not nearly so many of these flowers in the hands of the street vendors as last year.

And just at this time, when all the flowers are scarce, one of our most trusted roses has backslidden disgracefully; the American Beauty has disappointed a great many growers in the matter of

flowering. It is not in one or two cases, but in many, and there is no apparent reason to assign for this freak. The plants have made their growth all right, but the flowers produced are few and poor in quality. So Beauties are scarce, and the disappointed growers are trying their best to discover some reason for the failure.

The excellent rules for judging at flower shows suggested by Mr. Jordan at the Chicago exhibition are similar to those used by the New York Horticultural society. It is the fairest—in fact, the only unimpeachable mode of judging. In judging elaborate floral designs the qualifications passed upon are taste, suitability and value of flowers, superiority in either quality giving a certain percentage. Each judge decides on his percentage separately, so there is no likelihood of partiality. But certainly it is most satisfactory to all concerned to select outsiders from a distance as judges; it is rather a thankless position at best.

Eucharis, which used to be rather a rare and expensive flower, were very plentiful this fall. Like a good many other things, they will pay best for regular cutting when planted in a bed, instead of taking the bother of potting them. Poinsettia is always more of a success when grown in this way. Of course poinsettia bracts do not bring the price they did years ago, but every grower wants a few, and they are salable enough around the holidays. The bench system is certainly most satisfactory for them, and for euphorbia if the latter is grown.



Some of the finer varieties of cyclamen are being grown for cut flowers here, though they do not hold the same rank as they do abroad. The trouble is that florists here want everything with long stems, and a cyclamen with a 24-inch flower stalk is an improvement not yet effected. This necessity of long stems is rather trying with some short-growing roses, because the grower has to cut a majority of the plant with each flower. But of course it does away with a good deal of wiring and the flowers keep better in consequence. One would imagine that the cyclamen would be very enduring when cut, as the flowers usually have a good deal of substance, but I am told that this is not the case. However, there is no reason why the plants should not be used in decorating, just as gloxinias were last winter; the foliage in the new varieties is so distinctly handsome that these plants ought to have a little "boom."

Judging from appearances, this ought to be an orchid winter in the cut flower trade. Probably the prices realized for these flowers will not be extravagantly high, because almost every grower is going in for them, but there is no reason why they should not be made to pay, so many of them take up very little room in proportion with the amount of bloom produced. Just now there are more *laelias* and *cypripediums* to be seen than anything else; *calanthes*, too, are in good condition, and their easy culture makes them very desirable for cut flowers. They last well when cut, and the rosy hue of *C. Veitchii* gives it additional value; this tint is not very common among orchids. It makes an exquisite combination with the lighter colored *cypripediums*. A little later on we shall have a flood of *cattleya* blooms to take the place of the earlier *laelias*. But arrangements in orchids have to be put together with a good deal of taste and judgment, or the effect is entirely lost. Massing is a mistake; every flower must stand out individually, to show its own distinctive beauty. There must be good judgment in the selection of foliage too; probably there are more mistakes made in this particular than in any other item in making up. And the culprits are very often people who really ought to know better.

Countess de Frigneuse is certainly a very attractive rose in color and shape, but—there is always a but—what a pity the stems are not a bit stiffer; it would be a decided advantage. Princess Beatrice seems to be the coming rose with the Philadelphians; we don't hear quite so much about it around New York, though its charms are recognized here too.

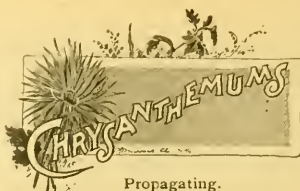
EMILY LOUISE TAPLIN.

*PRIMULA ORCONICA* is blooming freely, and it throws its flowers well up above the foliage. I believe there is a bright future for this plant. Raise it from seed.

*RUCELLIA MACRANTHA* is in fine bloom. Its flowers are very large, rose-purple and showy, but we have complaints that they drop soon after being cut. All my 1-year old plants are in bloom.

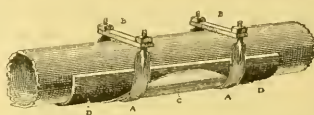
*BEGONIA INSIGNIS*—an extremely free and showy flowering kind in best condition in December. Raise a young stock from cuttings every year.

*SCARLET NASTURTIUMS* (*Tropaeolum Lobbianum*), trained to strings along the rafters of my carnation house, are yielding many welcome flowers. They are growing in pots set on a shelf near the glass.



*Chrysanthemums* will now be done blooming, and such as are required for propagating purposes should have proper attention. Generally, one or two plants of each variety will be sufficient; when cut back, top dress with good compost and place in a house where they will have plenty of light and a temperature of from 45° to 50° at night. Some care will be necessary in watering, and it is really better to err on the dry side. In selecting shoots for cuttings, use only the stoutest and thriftiest looking; a weak, spindly cutting—if it turns out anything at all—will turn out an unhealthy plant.

A. W. M.



STOPPING LEAKS IN STEAM PIPES.

- A. Clips.
- B. Lip bars.
- C. Felloe clamp.
- D. Piece of rubber hose.

#### Chrysanthemums at Worcester, Mass.

The Hort. society held its fourth annual exhibition Nov. 10, and it was a success in every way. The State lunatic hospital and H. F. A. Lange had the best plant displays, and Mrs. J. M. Woodice was first in flower display. The plants averaged from two to four feet in diameter, and the flowers from four to seven inches. One bloom of *Dominion* measured seven and one-half inches, while *La Puritie* had over 400 flowers. Among the best blooms exhibited were those of *Dominion*, *Source d'Or*, *La Triomphante*, *Damio*, *Cullingfordii*, *Robert Rotomly*, *Mme. Andignier* and *M. V. Morill*. Following are the awards, first and second premiums in the order named:

Best six Chinese, named: State lunatic hospital, Fred H. Wesson. Six Japanese, named: State lunatic hospital, H. F. A. Lange. Six Pompon, named: State lunatic hospital, Fred H. Wesson. Three plants from amateurs: Mrs. C. E. Brooks, Joseph Birrieri. Best display: State lunatic hospital, H. F. A. Lange. Specimen plant, any variety: State lunatic hospital, Mrs. C. E. Brooks. Twelve blooms Japanese, named: Mrs. J. M. Woodice, Mrs. C. E. Brooks. Six blooms Japanese, named: Mrs. J. M. Woodice, Mrs. C. E. Brooks. Twelve blooms of Chinese or large flowered, named: Mrs. C. E. Brooks. Six blooms Chinese, named: Mrs. J. M. Woodice, Fred H. Wesson. Twenty-four sprays of Chinese or Japanese, named: Mrs. J. M. Woodice, Mrs. C. E. Brooks. Twenty-four sprays Pompon, named, not less than twelve varieties: H. F. A. Lange.

Mrs. J. M. Woodice's blooms were all from plants grown out of doors.

A. H. LANGE.

#### Stopping Leaks in Steam Pipes.

About now the weak spots begin to show themselves in steam pipe that has been in use eight or ten years; generally by the opening of a crack two or three inches long where the weld was not quite perfect. It is no joke to have this hap-

pen, as it is sure to do, in the dead of night and the coldest kind of a night at that. To cut out the defective piece and fit in new pipe is of course an undertaking quite out of the question for the night fireman, and it is apt to be highly objectionable to have to leave the steam shut off from that line of pipe just at the time when it is most needed.

One can buy, however, from a dealer in carriage hardware, just the appliances needed for a cheap and easily applied stopper for such leaks, and so effective as to quite obviate the necessity for cutting out the pipe at all. The stopper consists of two axle clips with yokes, one felloe clamp and a bit of rubber hose five inches long slit in two lengthwise. Spread some thick red lead on the bit of rubber and apply as shown in the cut. Having the materials ready to hand, with clips bent to the proper curvature, a leak may be stopped in fifteen minutes at a cost (for one inch pipe) of twelve cents per leak.

For such pipe the proper clip is one having the flat part four inches long, but they can be had of any length, adapted for different sizes of pipe.

Riverside, Ill. J. D. RAYNOLDS.

#### Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1886.

Dec. 16—Tem., morning 0°, noon 12°, evening 8°. Wind NW. to WSW. Propagated *Achyranthes metallica* and *Thymus argentea*. Thinned foliage of little geraniums in Nos. 4 and 5. Cleaned canas, echeverias and other plants.

17—Tem. 24, 32, 31. SE. Same as yesterday.

18—Tem. 27, 35, 28. NW. Same as yesterday.

19—Tem. 19, 24, 16. W. Sunday.

20—Tem. 11, 29, 31. S. Put in bench cuttings of *Geranium Mt. Snow*. Rearranged plants in No. 6.

21—Tem. 30, 29, 22. NW. Same as yesterday, and put in cuttings of Earl Roslin geraniums and an assortment of fuchsias. Thinned foliage of *Mad. Salleroi* geraniums.

22—Tem. 13, 25, 21. NW. to SW. Propagated winter-flowering begonias, heliotropes and additional *Begonia semperflorens rosea*. Thinned foliage of *Mad. Salleroi* geraniums. Potted off balance of rooted cuttings of *Begonia semperflorens rosea* and *B. nigricans*.

23—Tem. 29, 34, 33. SE. to SW. Propagated heliotropes, matricarias, *niernenbergias* and variegated *alyssums*. Cleaned piles and *alyssums*.

24—Tem. 30, 29, 20. NW. to W. Same as yesterday.

25—Tem. 26, 28, 26. E. to SE. Christmas day.

26—Tem. 25, 21, 12. NW. Sunday.

27—Tem. 15, 5, 4. W. Propagated variegated *alyssums*. Thinned foliage of *Mad. Salleroi* geraniums, and cleaned other plants.

28—Tem. 3, 10, 7. W. Commenced potting rooted cuttings of *Achyranthes Lindenii*—two in a 2½-inch pot.

29—Tem. 12, 22, 17. NW. to SE. Same as yesterday, and took inventory of tools on hand. Sowed seed of *verbena venosa*.

30—Tem. 14, 26, 23. SE. Potted from bench rooted cuttings of *Achyranthes metallica*. Potted cuttings of *Thymus argentea*—four in a 2½-inch pot. Cleaned *altenantheras* in No. 3.

31—Tem. 23, 30, 27. NE. to NW. Same as yesterday.

Professor Asa Gray Very Ill.

BOSTON, Dec. 10.—Dr. Asa Gray, the eminent botanist of world-wide reputation, lies ill at his home in Cambridge, suffering from a stroke of apoplexy, from which it is feared he will not recover. Dr. Gray is 77 years of age.

### SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order.

**SITUATION WANTED.**—By a florist; Scotchman; single; 12 years' experience, 7 years in this country; private or commercial place. Address: GARDNER, 45 High St., Pawtucket, R. I.

**SITUATION WANTED.**—By an experienced florist, S as foreman; temperate and capable. Only parties working for first-class trade need answer. Address: EASTERN, care American Florist.

**SITUATION WANTED.**—Foreman, commercial or private. Had charge of place for three years; good reference; American; married; temperate. Address: C. H. M., 50 Green St., Portland, Me.

**SITUATION WANTED.**—By an experienced cut flower and plant grower and floral designer, as foreman; capable of taking charge of business; good references as to character and ability. Address: W. J. F., care W. J. Stewart, Boston.

**SITUATION WANTED.**—As gardener and florist; 21 years' experience in growing plants and cut flowers, growing and treating roses a specialty for seven years, in all the States. German; single; well recommended. Address: A. GRIGIN, 225 W. Jefferson St., Louisville, Ky.

**SITUATION WANTED.**—As foreman in commercial greenhouse business; understands forcing, propagating and shipping; 15 years' experience. Western place preferred. Address: D. S. HEFFRON, care American Florist, Chicago.

(The party who sent in above adv. will please send his name and address. Pub. Am. FLORIST.)

**SEEDSMAN WANTED.**—Active experienced man, able and honest; steady place at \$35.00 to \$40.00 per month. Address: A. B., care Am. Florist.

**WANTED.**—Florists bear small in prices of Pots. Read "ad" of the SYRACUSE POTTERY.

**WANTED.**—Second-hand 4-in. cast pipe. Address stating quality and price. D. S. HEFFRON, Washington Heights, Ill.

**WANTED.**—An assistant in general greenhouse business; a young German preferred. Address in person or by letter, JNO. D. MILAY, Zanesville, O.

**WANTED.**—Florist and gardener to take charge of two greenhouses and vegetable garden, doing retail trade; single man preferred. Address, stating wages. BAITON BROS., Uniontown, Pa.

**WANTED.**—A first-class gardener to take charge of a large commercial place as foreman and superintendent. (Single). The very best reference required. Address HOME, care American Florist.

**WANTED.**—Price lists of greenhouse building material and appliances, heating apparatus, glass and glazing tools and other materials used in constructing greenhouses. FRED. J. KING, Ottawa, Ill.

**WANTED TO RENT.**—By a reliable party, about 10,000 to 15,000 square feet of glass for rose culture, in vicinity of N. Y.; must be in good repair, plenty of water, etc. Address: CONFIDENTIAL, care Am. Florist, Chicago.

**FOR SALE.**—The best retail and wholesale florist and seedling business in the Northwest (population 150,000). Reason for selling, with full particulars furnished on application. Address: BATA, care American Florist, Chicago.

**FOR SALE CHEAP.**—Small greenhouse 11 x 60 with Hichings boiler and appliances, heating apparatus, all in good condition, at Evanston, Ill., twelve miles north of Chicago. For particulars, address: D. S. HEFFRON, care American Florist, Chicago.

**FOR SALE.**—Rare chance for a florist with small capital to buy a business. Fifteen years established; as I will devote my time now only to landscaping. Charge of the place may be taken now until next April—no opposition. Address: M. J. NAGLE, Jefferson City, Mo.

**FOR SALE.**—Two greenhouses 18 x 83 each, with stock 20 x 15; fine retail location in the center of Chicago. The houses are well stocked and everything in first-class running order. Doing a good business. Will sell for \$2,000. Have other business and cannot attend to both. A fine chance for a young man to get a start. Don't try until you see the place. Address: CLARK, care American Florist.

## ROSES.

I am growing all the leading foreign varieties in large quantities.

Contracts made now for plants delivered in March, April and May.

W. W. COLES,

LANSOWNE, DELAWARE CO., PA.

## A. C. TUCKER,

Rose Grower,

P. O. Box 190. NYACK, N. Y.

Orders are solicited NOW for Spring delivery for the following plants, in any size pots and in any quantity:

PERLE DES JARDIN, NIPHETOS,  
BON SILENE, LA FRANCE,  
SOUVENIR D'UN AMI, C. MERMET,  
AMERICAN BEAUTY, BRIDE,  
PAPA GONTIER, PURITAN.

Special discount given on all orders received up to Feb. 10th, 1888. Send for circular giving prices and terms.

A. C. TUCKER.

Mention American Florist.

## 100,000 ROSES.

The leading varieties, at \$4.00 and \$5.00 per hundred.

Fine stock of VERBENAS, \$2.50 per hundred.

Large stock of BEDDING PLANTS at lowest figures. Send for Trade List, now ready.

GEO. THOMPSON & SONS.

LOUISVILLE, KY.

Merrie Xmas and Happy New Year.

## JAMES HENDRICK,

FONT GROVE GREENHOUSES,

SLINGERLANDS, Albany Co., N. Y.

Infirms the trade that all plants sold by him are grown from HEALTHY PARENTS, and always as represented. Florists who need good stock at the lowest rates that can be named, upon the principle of live and let live, are invited to ask for prices.

OUR FAVORITES FOR FORCING ARE

Mermets, Brides, Perles, Niphotos, Souvenirs, Sunsets, Gontiers and Bon Silenes.

We have many others, but these we find best.

Orchids, self-wooded Plants and a general assortment always on hand.

## TO THE TRADE.

TWO NEW

### HYBRID \* PERPETUAL \* ROSES.

Special Award from the New Orleans Horticultural Society, March, 1887.

DUC DE GALESE,

Bright pink, a good bloomer, very fragrant.

PRINCE BORGHESE,

Dark velvet red, a good bloomer, very fragrant.

PRICE LIST.

Plants, 12-inch, \$1.00 each; 20-inch, \$2.00 each; and strong plants from open ground, at \$3.00 each.

Send Orders to City Depot, St. Charles and Delord.

J. H. MENARD,

NEW ORLEANS, L. A.

## B. P. CRITCHELL & CO.

LIST OF NEW ROSES AND

ROSE STOCK FOR FLORISTS

Will be issued January 10th.

Will contain a fine list of STOCK for FLORISTS' use for Spring and growing for stock. Will be mailed to all addresses in the new FLORIST'S DIRECTORY. Yours Truly,

B. P. CRITCHELL & CO.,

Cincinnati, O.

### FOR SALE.

500 Jack. Roses, 4-inch, strong, at.....	\$10.00
500 Hydrangea Panicleata, 2-inch.....	3.00
500 Chamerops humilis, 3-inch, strong.....	5.00
2,000 Roses, general assortment, 2-inch, semi-dormant.....	per 1,000, \$20.00; 2.50

JOSEPH E. BONSALL, SALEM, O.

## OUR SPECIALTIES.

## NOVELTIES IN ROSES AND OTHER PLANTS.

(—) ALSO (—)

FLORISTS' STOCK FOR FORCING.

## HILL & CO.,

RICHMOND, IND.

### NOVELTIES IN ROSES.

Also the leading forcing varieties Teas, H. Teas and H. Perpetuals. 1,000 large roses in 6 and 7-inch pots; C. Mermet, La France, Sunset, Perles and Bon Silenes, at \$25.00 per 100. Chrysanthemums, best varieties, 5 and 6-inch pots, \$15.00 to \$20.00 per 100. Bonvardians, 2½-inch pots, \$3.00 per 100. Gardenia Radicans, 6 inch pots, \$5.00 per 100. Grand Duke Jasmine, 6 inch pots, \$8.00 per 100. 3,000 American Holly, flex opes, 6 inch pots, \$12.00 per 100. Choicest buds and cut flowers at lowest market prices.

JACOB SCHULZ, LOUISVILLE, KY.

## IMPORTED M. P. ROSES,

Worked low on the Manetta Stock, offer the best results to the florist, blooming trees and giving plenty of cuttings for propagation quickly. Fine plants for sale by the 100 or 1,000, at low rates.

Address:

WILLIAM H. SPOONER,

JAMAICA PLAIN, (Boston), MASS.

Budded Roses for Winter Forcing or Spring Market Sales—H. P. and Teas.

### SPECIAL OFFER:

The following varieties, equal quantities of each, we sell for \$10.00 per 100.

H. P.—Anna de Diesbach, La France, Gen'l Jacqueminot, Paul Neyron, Queen of Queens, Comtesse of Oxford, Jules Margulien, Anna Alexied, Mme. Gabriel Laizet, Mme. Knorr, Marie Baumann, Gloire Lyonnaise, Her Majesty, M. de Lyon, Alfred Colomb. The following Teas: Roses at \$12.00 per 100. Perle des Jardins, Mme. Lambert, Marie Van Houtte, Mme. Fulcot, Mme. Charles, Mlle. Francisca Kruger, Duchess Madeline, Cornelia Cook.

Catalogue on application. Dormant buds of the new H. P.s of 1887—Earl of Dufferin, dark, nearly black; Lady Helene Stewart, red. The new Tea Rose Miss Ethel Brownlow, similar to C. Mermet, very free flowering. All at \$1.00 each.

Cyclamen persicum, fine plants in buds which will flower in November, \$1.00 each. American Beauty, Bennett, Papa Gontier, Niphotos, 100 each.

SCHULTHEIS BROTHERS,

P. O. Box 73. COLLEGE POINT, LONG ISLAND, N. Y.

## E. BENARD,

ORLEANS, FRANCE.

ROSES ON THEIR OWN ROOTS

A SPECIALTY.

NURSERY STOCK OF ALL DESCRIPTIONS.

For particulars apply to

E. BENARD, JR., NILES, CAL.

## (—) TREE ROSES. (—)

The very FINEST and BEST quality.

GABRIEL MARC,

WOODSIDE, L. I., N. Y.

## JAMES L. BOYSON,

CAEN, (CALVADOS) FRANCE.

1st Prize for Cut Blooms, Paris, May, 1887.

My Catalogue of the NEW

## EUROPEAN ROSES

will be ready January 1, 1888, and will be sent FREE on application.

A large stock of the last two years varieties, as well as all the older kinds for sale.

Send for my complete Catalogue of over 1,300 varieties, with raisers' names and date of sending out

## ROSES.





## THE CUT FLOWER TRADE.

### Winter Floral Fashions.

BY OUR NEW YORK CORRESPONDENT.

As the season progresses a preference for pale-tinted flowers prevails, and a greater inclination to avoid mixture of colors, shadings of the same being the rule in artistic arrangements. Dinner and luncheon parties seldom show more than one kind and color of flower; violet luncheons, orchid dinners and the like being the vogue, the hostess indulging herself and guests with a display of her favorite blossoms. Doe parties, or gatherings of ladies for a noon feast, are very fashionable. On these occasions there is a finer display of flowers than food. A doe party given to Miss Ellen Terry by Mrs. Hawk of the Windsor hotel was profusely decorated with American Beauty roses, of which a bouquet and basketful was presented to each guest to carry home. Siebrecht, Wadley & Thorpe made a rich arrangement of orchids for a dinner last week. The table cover was a pearl satin one. The center pieces were silver bowls and epergnes, which were filled with gorgeous cattleyas, mostly C. trianæ. At each cover stood a slender cut glass specimen flower-holder, in which there were three cattleyas and adiantum fronds.

Carte blanche orders have given our florists opportunity to make magnificent arrangements for receptions and parties introducing debutantes. The evening of the 5th Delmonico's saloon was dressed with roses, which were made into clusters for the walls and mirrors, and in banks for the corners. The balconies were fringed with long stem roses and vines. The effect was very elegant, as there was no attempt at formality. For the wedding of a young widow there was a tent made of bamboo sticks and curtains of asparagus. These curtains were formed by the interlacing of slender wires covered with A. plumosa. Where the tent opened there was an edging of hyacinths, the curtains being held back with superb clusters of this flower, bride roses and loops of white satin ribbon. The bride, groom and minister stood within the tent, and three bridesmaids stood each side. The bride's gown was a marvel of floral elegance. The train breadths were four yards long and one solid sweep of Roman hyacinths, the spikes all being laid one way to represent fringe. The gown was white satin; it was made with an Elizabethan collar composed of hyacinths, these standing up as they covered the high collar. There was a girdle of hyacinths placed just below the pointed corsage. This girdle was finished by tassels of the same flower. The floral divan was made up in high style of violets and yellow roses for the drawing room. Instead of a bouquet the bride carried a Leghorn hat filled with hyacinths, which was swung over her arm with ribbons.

The most fashionable gift to debutantes is a basket of pink roses. The basket is of light open work straw, flaring and with a high loop handle. It is filled with Mermet and Luizet roses (which combine exquisitely) and is festooned with Adiantum cuneatum. The handle is wound with pink satin, and on the left side is a French loop with ends made of the ribbon. Among new souvenirs is a creel of rush straw which is filled with violets of all shades, including a cluster of white ones embedded in one side. Loops of bullion cord form the handle, which is finished where attached by bullion tassels. This basket cannot be made up for less than \$40.

Hedges of foliage are introduced in all the large decorations where the apartments are sufficiently spacious. Gates arched with foliage are passages through the hedge.

### New York.

Mr. Chas. Henderson is very ill with typhoid fever.

Mr. J. C. Vaughan of Chicago paid a flying visit to New York on the 7th inst.

Mr. John Thorpe has had a serious attack of nervous prostration. He is slowly recovering.

The chrysanthemums Golden Eagle and Mrs. Jesse Barr are the latest lingers in these parts this season.

Mr. T. H. Spalding, president of the New York Hort. society, on the presentation of the Langtry cup to Mr. John Finn, will give a dinner to this gentleman and sixteen other friends.

The meetings of the New York Florists' Club are to be hereafter held in the daytime and down town, to accommodate members living out of town. At a recent meeting of the club \$1,100 was subscribed toward a fund to entertain the S. A. F. in '88.

### Boston.

D. M. Stimson, a well-known West End florist, died on Dec. 5.

A bunch of blooms of the May flower (*Epigæa repens*) was shown by Jackson Dawson at the December meeting of the Gardeners and Florists' Club.

Among the novelties now seen in the florists' windows are some magnificent Harrisii lilies. They have never been seen here so early before.

Orchids, such as *Cypripedium insigne*, *Lælia albidula* and *Zygopetalum Mackayi*, are now in market. *Primula obovata*, *Erica Willmoreana*, *Euphorbia jacquiniiflora* and an occasional bunch of lilac are also among the rarities offered.

Preparations for the holidays are now in order, and the growers are beginning to cruise about, feeling the market. Starting out with a firm conviction that it is easier to come down on prices than to go up on them, they find it slow work

to get contracts at figures quoted, but perhaps the clerk of the weather will come to their assistance, for there is no great over-stock of roses in this market, and a cold snap about Christmas time will undoubtedly make them very scarce. Lily of the valley, Romans, carnations and camelias will probably be in fair supply for the holidays, and there will still be a few chrysanthemums left.

The December meeting of the Gardeners' and Florists' club was one of the best meetings they have ever had. The attendance was large and the discussions earnest and intelligent. The subject under consideration was violets, the essay being delivered by Mr. L. H. Foster, who handled the question in a very able manner. The club has finally secured a suitable club room and has taken a lease of the same and appropriated money for furnishing it. The January meeting will be held at the new room. Mr. J. C. Vaughan of Chicago was a welcome visitor at the last meeting of the club.

W. J. S.

PHILADELPHIA, DEC. 9.—The prospects for a good holiday trade are excellent. Flowers are plentiful, the supply of roses especially considerably exceeding that of last year at this time. This is undoubtedly due to the fact that many growers have this year devoted glass to roses which was last season in other stock, and has resulted in a larger supply and somewhat lower prices. All other flowers hold their own in price except carnations, which are also in better supply than last year. The American Beauty forges ahead, while the Gontier sells too cheap. The Bride is in good demand, but the La France heads the list in demand, and as the supply is good, large quantities are sold. Why don't somebody grow good Niels in this part of the country? The price asked for Bennetts is more than they are worth.

LA ROCHE & STAHL.

### New York Retail Prices.

Perles, Niphetos and Souvs, \$1.50 a dozen; Mermets and Bennetts, \$2.50; La France, \$3.50; Bon Silenes, \$1; Gontiers, \$2; Am. Beauty 75 cents each; carnations, 50 cents a dozen; Lily of the valley, \$2; hyacinths, \$1.25; sniilax, 50 cents a string; violets, \$2.50 a hundred.

FAIRFIELD, CONN.—John and Willie Dallas, aged 14 and 12 years, the sons of John Dallas, an excellent and well-known gardener, were accidentally drowned while skating on the 3d inst. Mr. Dallas has the sympathy of his numerous friends in his bereavement.

WASHINGTON.—Fire did considerable damage in the greenhouses of C. M. Shickler 1355 E street SE., on the 8th inst. The fire caught from the furnace. The principal loss was in plants.

**THE AMERICAN FLORIST**

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 Cents a Line, Adgate;  
Inch, \$1.40; Column \$14.00.  
Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per cent; 12 months, 20 per cent.  
No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

1277 advertisements for January 1 issue must REACH US by noon, Dec. 26. Address

THE AMERICAN FLORIST CO., Chicago.

**Catalogues Received.**James King, Chicago, holiday goods;  
D. B. Woodruff, Macon, Ga., plants;  
L. Cauchois, Orleans, France, roses;  
Fred. Roemer, Quedlinburg, Germany, pansies;  
W. J. Birkenhead, Sale, near Manchester, England, ferns;  
Gebrüder Schultheis, Steinfurth bei Bad Nauheim, Hessen, Germany, roses.

THE ASSOCIATION of AMERICAN CEMETERY SUPERINTENDENTS holds its second annual convention in Brooklyn, N. Y., Wednesday, Sept. 5, 1888. A. H. Sargent, Akron, O., is secretary.

**W. S. ALLEN,****WHOLESALE DEALER IN CUT FLOWERS,**

36 EAST 23rd STREET, NEW YORK.

ESTABLISHED 1877.

Price List sent upon application.

**LaRoche & Stahl,**

Florists &amp; Commission Merchants

—OF—

**CUT FLOWERS.**1237 Chestnut Street, - - PHILADELPHIA.  
Consignments Solicited. Special attention paid to shipping. Mention AMERICAN FLORIST.**CHAS. E. PENNOCK,****WHOLESALE FLORIST,**

38 SO. 16TH STREET,

PHILADELPHIA, PA.

**CURRIE BROS.,**

Growers of and Wholesale Dealers in

**CUT FLOWERS**

MILWAUKEE, WIS.

SEND FOR PRICE LIST.

**CUT FLOWERS AT WHOLESALE**

For XMAS and NEW YEAR'S by

N. F. MCCARTHY & CO., Wholesale Florists,  
63 Bromfield St., under Hort. Hall, Boston, Mass.

We have made large contracts with the best Rose growers about Boston to handle their entire stock this season. Our stock will consist of Papa Gontier, Bennett, Pierre Guillott, American Beauty, Mermet, La France, Malmaison, Cook, Bride, Niphetos, Perle, Niel, Anna Webb and Grace Wilder pinks, long stems; other varieties in quantity. We shall have a particularly large lot of Mermet and Perle, so that in sending to us when you fail to get them elsewhere you will feel reasonably sure of getting them. Unknown parties must give satisfactory reference or let us send C. O. D. Write for information.

**M. MALSH,**

206 S. Halsted Street, CHICAGO.

WHOLESALE DEALER IN

**CUT FLOWERS,**  
AND GROWERS' AGENT.

Regular shipping orders especially solicited.

**Wholesale Market.****Cut Flowers.**

BOSTON, Dec. 9.	
Roses, Teas.....	\$3.00
" Perles, Niphetos.....	8.00
" Bennett, Mermet.....	10.00
" Brides, La France.....	12.00
Carnations.....	1.00 @ 2.00
Lily of the valley.....	4.00
Bouvardia, stelia.....	1.00
Romans, narcissus, tulips.....	4.00
Harrisii lilies.....	25.00
Adiantums.....	1.50
Smilax.....	15.00
Violets.....	1.50

NEW YORK, Dec. 9.	
Roses, Perles, Niphetos, Souvs.....	\$4.00
" Mermet, Bennett.....	8.00
" Bon Silence.....	3.00
" Papa Gontiers.....	4.00
" Am. Beauty.....	25.00 @ 50.00
" La France.....	10.00 @ 15.00
Carnations.....	1.00 @ 2.00
Lily of the valley.....	8.00
Hyacinths.....	3.00
Smilax.....	25.00
" La France.....	2.00
Tulips.....	4.00

CHICAGO, Dec. 10.	
Roses, Perles, Niphetos.....	\$7.00
" Mermet, Bennett.....	9.00
" La France.....	10.00
" Am. Beauty.....	25.00
" Safron.....	3.00
" Bon Silence.....	4.00 @ 5.00
Romans.....	8.00
Carnations, long stems.....	2.00 @ 3.00
" short stems.....	1.00
Callas.....	15.00
Smilax.....	22.00
Adiantum ferns.....	1.25
Ivy leaves, stelia.....	1.00
Violets, bouvardia.....	1.00

PHILADELPHIA, Dec. 9.	
Roses, Teas.....	\$3.00
" Perles.....	5.00
" Niphetos.....	4.00
" Mermet.....	6.00
" La France, Bennett.....	8.00
" Cook.....	10.00
" Niel.....	15.00
" Gontiers.....	3.00
" Am. Beauty.....	25.00
Carnations.....	1.00 @ 1.50
Romans Hyacinths.....	5.00
Bouvardia.....	1.00
Smilax.....	20.00
" La France.....	3.00
Callas.....	10.00
Violets, double.....	.75 @ 1.00
" single.....	.25

**FOR THE HOLIDAYS.**

And for all other occasions where First-Class Flowers are required, ORDER IN ADVANCE, and you will be well served.

Read the following unsolicited Testimonials:

ST. LOUIS, Mo., Nov. 3, 1886.  
Flowers come to hand in fine order.  
J. S. WILSON & BRO.TOLEDO, O., Dec. 27, 1886.  
The flowers you sent us last Friday were very fine.  
MRS. E. SUDER.DETROIT, MICH., Dec. 25, 1886.  
The flowers were lovely and came through beautifully.  
JAS. VERNOR.NEW ORLEANS, LA., Jan. 10, 1887.  
Flowers came in first-class condition; very satisfactory.  
R. MATTHE.MILWAUKEE, WIS., Oct. 22, '87.  
Everything came in fine shape and on time.  
FRANK WHITNALL & CO.**OUR SPECIALTIES NOW ARE:**LILY OF THE VALLEY, FINE ROSES, VIOLETS, LONG STEMMED CARNATIONS, JAPANESE CHRYSANTHEMUMS, PRIMULA OBCONICA, ADIAN, TUN FARLEYENSE AND CUNEATUM.  
Holly, English Mistletoe, Palm Leaves and Pine Plumes for the Holidays.**WM. J. STEWART,**  
Send for price list. 67 Bromfield St., BOSTON.**W. F. SHERIDAN,**  
**WHOLESALE FLORIST**721 SIXTH AVENUE, N. Y.  
Mention American Florist.**KENNICOTT BROS.,**  
**WHOLESALE FLORISTS.**ALL CUT FLOWERS IN SEASON.  
Write for price list.  
27 Washington Street, CHICAGO.**Thos. Young, Jr., & Co.,**  
**Wholesale Florists,**

INCORPORATED 1883,

28 W. 24th St., NEW YORK.

**Speaking About****CUT FLOWERS,**

You can get very fine cut roses, carnations and a full general line on shortest notice from J. C. VAUGHAN, 42 La Salle Street, Chicago. Store open day and night. Refers to all florists west of Ohio river to Salt Lake City, as to prompt shipment and satisfactory stock.

**WELCH BROS.,**  
**WHOLESALE FLORISTS,**

165 Tremont Street, BOSTON MASS.

We make a specialty of shipping choice Roses and other Flowers, carefully packed, to all points in Western and Middle States.  
Return Telegram is sent immediately when it is impossible to all your order.**HAMMOND & HUNTER,**  
Wholesale dealers in  
**Cut Flowers and Florists' Supplies**  
61 West 30th Street, NEW YORK.**GEO. MULLEN,**  
17 CHAPMAN PLACE, (near Parker House),  
**BOSTON, MASS.**  
**WHOLESALE AND COMMISSION DEALER IN**  
**Fresh Cut Flowers & Florists' Supplies.**Flowers carefully packed and shipped to all points in Western and Middle States.  
Orders by Telegraph, Mail, Telephone or Express promptly attended to.**THEO. ROEHRs,**  
**WHOLESALE**  
**FLORIST,**  
153 W. 31st St., NEW YORK.

—: SPECIALTIES:—

SMILAX, NARGISSUS, LILY OF THE VALLEY,  
TULIPS, ROMAN HYACINTHS, LILACS.**C. STRAUSS & Co.**

Telephone 977-3. WASHINGTON, D. C.

Growers of and Wholesale Dealers in

**ROSES and OTHER CUT FLOWERS**  
1000 Puritan Planted for coming Winter.**CUT FLOWERS**

The choicest Cut Flowers at lowest market rates shipped C. O. D. Telephone connection. Use A. F. Code when ordering by telegraph. For prices, etc., Address,

J. L. DILLON, BLOOMSBURG, PA.

**ROSS & MILLANG,**  
**Wholesale Florists,**  
NO. 1168 BROADWAY,  
(Formerly at 225 5th ave.)  
Bet. 27th & 28th sts., NEW YORK.



## Seed Trade.

SEED TRADE ASSOCIATION.—William Meggat, president, Wethersfield, Conn.; Albert M. McCullough, secretary, Cincinnati, O.

M. B. FAXON has opened a seed store at 21 South Market street, Boston.

H. KIENAS & SON, La Crosse, Wis., expect to add a seed department to their florist business the coming spring.

JAMES REID.—A portrait and sketch of the life of the James Reid will be found on the second page of this issue.

CHICAGO.—O. F. Gibbs made an assignment to Joel V. Taylor on the 7th inst. Mr. Gibbs has been in the seed business for a number of years, but has lately been unfortunate. His attorneys state that lack of ready money and a desire to retire from business induced the assignment. The assets and liabilities are about \$40,000 each, and the assets will be ample, it is said, to cover all claims. The warehouse is on the corner of Clark and Sixteenth street.

## A Day or Two in the Effete East.

It is not true that grass grows in the Buffalo streets. They've had a boom.

Rochester gets its share of lithographing and printing, as well as seed business.

Boston is agitated about the disruption of its seed combination, but hopes still for gentle peace. The Gardeners and Florists' Club has come to stay.

New York: All are not gone west; traces of man may still be found in the vicinity of Broadway and Fulton streets. Let us not be over-anxious concerning her future.

Philadelphia does progress. That "public building" has acquired another story; her car conductor no longer scorns a nickel; Dreer's seed store windows are the most slow in the Union; A. Blanc is the florist and seedsmen's engraver, and her florists grow many plants.

And everybody says: "Good for you, you did hang those anarchists at Chicago." And they want to pat us on the back and give us a leather medal or something. But Chicago is modest; duty well done is her own reward. Now may the bean-eater eat in peace, liberty's torch blaze in New York bay, and the crow fly as lazily as ever over the brown hills and hemlock woods of Pennsylvania, for our flag, and none other, is "still there."

Baltimore.

Thanksgiving was not a harvest for Baltimore florists, but the week that has since elapsed has been a continuous round of dinners, weddings, etc., as a result the shekels have been freely exchanged for floral wares, and there is an unusual air of sociability about the boys. Halliday turned out some very handsome bouquets the other day for the wedding of Miss Tyson, one of Baltimore's society belles. The bridal bouquet was a magnificent combination of Puritan roses, maidenhair ferns and white satin ribbon. A basket of unique shape, to be worn at the bride's belt was filled with different varieties of adiantums and trimmed with white satin cords and ribbon. Of the six bridesmaids' bouquets, two were of Marchal Niels, two of La France, and two of Papa Gontier, each being finished with satin ribbon to match the flowers and the ladies' toilets.

Signs of the approaching Christmas tide are growing daily more numerous, and our florists are straining every effort to anticipate the holiday trade. A "fad" with society people last season was to send their friends some handsome plant in a jardiniere as a holiday remembrance; the same fashion promises to be prevalent this season, and the florist stores are filled with plants suitable for this purpose; some florists display small boxes neatly covered with moss and filled with decorative plants. Cut flowers promise to be abundant and of great variety. Roses, lily of the valley and Roman hyacinths are chiefly in demand at present; among roses, American Beauty is very popular. Halliday displayed some magnificent blooms of this variety last week; they were imported from the Hub, and showed that the Boston grower understands how to manage the Beauty.

A. W. M.

Montreal, Canada.

Owing to the lateness of the season at which the florists and gardeners met for organization last spring, the Florists and Gardeners' Club was not satisfactorily established, but at a meeting held Nov. 29 for organizing, the club was started on a firm basis with a constitution and by-laws.

The greatest enthusiasm prevails among the florists and gardeners here on the subject of organization, and everything points to a most successful issue, and many benefits are anticipated from discussions, etc., at subsequent meetings of the club. Over thirty have already become members and many more are expected to join at the future meetings.

The officers elected for the present year are: President, Jos. Bennett; vice-presidents, Jas. McKenna and Geo. Trussell; treasurer, John Doyle; secretary, Walter Wilshire; assistant secretary, Wm. Laughton; executive committee, C. Campbell, J. Walsh, J. Eddy, J. Navin and J. Stamford.

INDEPENDENCE, MO.—N. S. Griffith has this fall built six new greenhouses, each 100 feet in length.

A. BLANC,

ENGRAVER FOR



Florists and Seedsmen.

LARGEST AND BEST COLLECTION OF HORTICULTURAL ELECTROS IN THE WORLD.

314 North 11th Street, Philadelphia.



TRY DREER'S GARDEN SEEDS

Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free.

HENRY A. DREER, Philadelphia

MELON SEEDS 14c. to 40c. per pound. Send for PRICE LIST. Odella, Black Spanish, Kolt Gem, Dark Iceberg, Iron Clad, Pride of Georgia, Hackensack, Bird, Golden Gem, Bandana. FREEMAN HURFF, Swedesboro, N. J.

PAPER SEED BAGS. PLAIN OR PRINTED. BEST QUALITY AND AT LOWEST PRICES. Many years' experience in the Seed Business enables me to make Catalogue Work and Seed Bag Printing a Specialty. Refer to Philadelphia seedmen. GEO. A. KARR, Philadelphia, Pa.

SIBLEY'S TESTED SEEDS. CATALOGUE FREE! Containing all the latest novelties and standard varieties of Garden, Field and Flower Seeds. Gardeners everywhere should consult it before purchasing. Stocks pure and fresh, prices reasonable. Address: Hiram Sibley & Co., Rochester, N. Y., or Chicago, Illa.

**BURPEE'S FARM ANNUAL FOR 1888**  
Will be sent FREE toll who write for it. It is a Handsome Book of 128 pp., with hundreds of illustrations. Colored Plates, and tells all about the BEST GARDEN, FARM, and FLOWER Bulbs, Plants, and Valuable New Books on Garden Topics. It describes Rare Novelties in VEGETABLES and FLOWERS, of real value, which cannot be obtained elsewhere. Send in a postal for the most complete Catalogue published, to W. ATLEE BURPEE & CO., PHILADELPHIA, PA.



Warranted Seed.

I have founded my business on the belief that the public are anxious to get their seed directly from the grower, raising a proper proportion of the price and enabling me to warrant its freshness and purity, as my Vegetable and Flower Seed Catalogue for 1888, FREE for every son and daughter of Adam. It is liberally illustrated with engravings made directly from photographs of vegetables grown on my seed farms. Besides an immense variety of standard seed, you will find in it some valuable new vegetables not found in any other catalogue. As the original introducer of the Gellipe Beet, Burbank and Early Ohio Potatoes, Hubbard Squash, Delectable Cabbage, Cory Corno, and a score of other valuable vegetables, I invite the patronage of the public. JAMES J. H. GREGORY, Marblehead, Mass.

PLANET JR. GARDEN DRILLS. WHEEL HOES. HORSE HOES. FIRE FLY. Those who saw them at the Seed Trial in actual work say they are THE BEST yet. You will find them so. Our 788 Catalogue, with 40 Woodcuts, will give you a fair idea of the new tools and better money values are now offered. NEW STYLES. NEW PRICES. S. L. ALLEN & CO., Patentees & Mfrs., 127-129 Catharine St., Philadelphia, Pa.

# READY TO SHIP:

## ENGLISH MISTLETOE AND HOLLY,

### BOUQUET GREEN,

### AMERICAN HOLLY,

### SOUTHERN NEEDLE PINES,

### CAPE SMILAX, AND PALM LEAVES.

ENGLISH MISTLETOE, in boxes, \$3.00, \$5.00, \$8.00, \$15.00, \$18.00 and \$25.00 lots.  
 ENGLISH HOLLY, (well berried), \$6.00, \$10.00 and \$15.00 lots.  
 AMERICAN HOLLY, (well berried), \$3.00 and \$5.00 cases.  
 SOUTHERN NEEDLE PINES—PINUS ELEGANS, dozen, \$6.00; twenty-five, \$10.00; fifty, \$17.00; one hundred, \$30.00.  
 PALM LEAVES, \$10.00 per hundred.

BOUQUET GREENS, best quality, full barrels, \$2.75 each.

CUT ORCHID BLOOMS AT ALL TIMES.

**SIEBRECHT & WADLEY,**

409 Fifth Ave., NEW YORK.

Write or  
Telegraph

**STEWART OF BOSTON, FOR HOLLY**



## — FOR THE — HOLIDAYS

IMMORTELLES,  
 PAMPAS PLUMES,  
 CAPE FLOWERS,  
 GRASSES, DOVES,  
 — AND ALL —  
**FLORISTS' SUPPLIES.**  
 Manufacturers and Importers of Baskets.

LATEST NOVELTIES IN BASKETS.

M. M. BAYERSDORFER & CO.,

56 N. 4th Street,  
 PHILADELPHIA, PA.

ERNST KAUFMANN,

113 N. 4th Street, PHILADELPHIA, PA.  
**HEADQUARTERS FOR**

Immortelles, Grasses, Mosses,  
 PAMPAS PLUMES,

WHEAT SHEAVES, BOUQUET PAPERS.

And all other Supplies.

MANUFACTURER AND IMPORTER OF  
 BASKETS AND DESIGNS.



**XMAS TREES.**  
**Blue Spruce.**

Per 100  
 2 to 3 ft. .... \$ 6.00  
 3 to 5 ft. .... 10.00  
 5 to 8 ft. .... 15.00

Packed in light  
 cases, on car  
 here. Special  
 prices on car  
 lots.

W. D. Boynton,  
 SHIOCTON,  
 Wisconsin.

Mention American Florist.

## DOVES

Direct from the taxidermist. 1,500 in stock in various positions. Artistic and substantial work. Send for catalogue of Florists' Taxidermy.

**J. H. BATTY,**

94 Bleeker St., New York, and Parkville L. I., N. Y.  
 Author of "Practical Taxidermy and House Decoration," &c., &c.

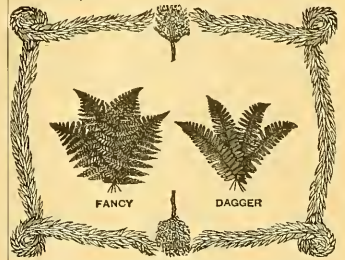
**B. B. NOURSE & CO.,**  
**WESTBORO, - MASS.**

Manufacturers of  
**POT PLANT, GARDEN AND VERANDA**

**TRELLISES,**

**TREE AND PLANT STAKES.**

## 500,000 CUT FERNS



These Ferns are from 10 to 15 inches long, of a beautiful dark green, and will keep for several weeks. They are used for

BOUQUET AND BASKET WORK, FILLING VASES,  
 DECORATING CHURCH ALTARS, ETC., ETC.  
 Are preferred by many to Smilax.

\$1.50 Per Thousand Ferns.

## 1000 BBLs. BOUQUET GREEN

Barrel or Sack of 30 lbs.....	\$ 2.00
100 lbs.....	6.00
1,000 lbs.....	55.00; 2,000 lbs..... 100.00

## 25,000 Yds. Wreathing or Roping.

This Roping is all made from First Quality BOUQUET GREEN wound with fine wire in thorough manner. Having used all kinds of material for Roping I have discarded them all and now use nothing but Bouquet Green. Reasons why it is the BEST: 1. It is the handsomest material nature produces. 2. It will stand the roughest kind of usage. 3. It will hold its color. 4. It will not shed or drop.

Wholesale Price.

3-inches diameter, flat or one-sided.....	4 cts.
4-inches " round with cord in center.....	6 "
5-inches " round, on heavy cord.....	10 "



## 10,000 Christmas Trees

FROM 3 FT. TO 30 FT. HIGH.

Fresh from the beautiful Berkshire Hills of old Massachusetts, where the finest shaped trees in the world grow.

Wholesale price of CHRISTMAS TREES put on cars at Hinsdale, Mass. If shipped from New York City add one-half to these prices:

4 to 5 ft. high.....	Each. \$ .10 to \$ .15
6 to 7 " .....	.20 to .30
8 to 9 " .....	.40 to .50
10 to 11 " .....	.60 to .75
12 to 13 " .....	.80 to 1.00
14 to 15 " .....	1.25 to 1.50
16 to 17 " .....	1.75 to 2.00
18 to 20 " .....	2.50 to 3.00
25 to 30 " .....	4.00 to 6.00

TREE FEET of all sizes. 18-in. square, pyramid, four blocks high, 50c; 15-in. 35c; 12-in. three blocks high, 25c; 9-in. 15c. Crosses, 18, 24, 30, 36, 42, 48, 60, 72 inches one cent an inch including braces, all painted two coats green.

SPHAGNUM MOSS, \$1.00 per Bbl., 6 Bbls. for \$5.00.  
 GOODS SHIPPED TO ALL PARTS OF THE U. S.

**L. B. BRAGUE,**  
 HINSDALE, MASS.

After Dec. 5th at the Old Stand, 47th St. and Lexington Ave., N. Y.

Terms Cash, or 30 days approved credit. All bills must be paid on or before January 1st, 1888.



## Natural Gas for Heating Greenhouses.

The almost incalculable advantages that the utilization of this vapor has given us is the greatest boon ever conferred on the florist, who lost many a night's rest by firing with other fuel. Now this product of nature was formed, whether its creation is still in progress, and other speculations regarding it, do not disturb our tranquility.

We heat by steam, having a tubular boiler of about fifty or more horse power; return all condensations from the pipes to the boiler with a steam trap, and we can turn on the gas as much as we need to keep the house at the required temperature, leaving it without any attention whatever for twenty-four hours—or for two or three days if the weather should not change too much—and the temperature in the houses will not change three degrees either way. From 30,000 to 40,000 feet of glass could be heated with one boiler, at about one half the cost of other fuel, including all the lights required (another item of consequence), and could be run perfectly safe without a night watchman, as we are doing now for the first time in nine years.

In running the plant without a watchman we assume two risks which we easily overcome. The first and greatest danger in heating with steam is to get the water too low or too high in the boiler, thereby getting too much or not enough steam; and to surmount that difficulty we placed a low and high water indicator on our boiler, which will blow a loud whistle as soon as the water goes below or above a certain point at which it is set, and will continue whistling until the boiler is fed again when water is low, or drained when too high, giving more live steam. If you have a reliable steam trap (as I must say we have), the water in the boiler will not drop one inch over night, and the steam gauge will indicate the same pressure in that time. The second risk we run is that the gas may be turned off, leaving us without fuel; but as we use the same fuel in our sleeping rooms and have the gas burning, especially when it is cold, all night, we should soon discover when light and heat are gone from the room.

The pressure of the gas as it comes from the wells is from 200 to 500 pounds to the inch, and the pipes laid in the streets are taxed with a few ounces on low pressure mains (pressure reduced by regulators) to up to a hundred or more pounds on high pressure mains. To each service line from the main to the consumer's premises a regulator is placed, reducing the force to a few ounces, thereby giving a regular flow and more gas than you can ever use in the coldest weather; in addition, the flow is so steady that by a little experience you can turn the gas on or off to keep the temperature of the houses within a few degrees of what you desire. This vapor is also used for heating with flues and hot water boilers with the same results, but heating by steam is undoubtedly the best and cheapest mode of heating greenhouses.

Pittsburg, Pa. E. C. REINEMAN.

**MUSHROOMS.**—Will some one who has had practical experience please state if mushrooms can be grown successfully under the benches of a rose house? When is the best time to start? How should the manure be prepared? What thickness of bed, and what should be the general management in order to attain the best results? II.

# TROPICAL WATER LILIES, (—) ALL COLORS. (

ALSO TRUE  
CAPE COD PINK POND LILY,  
Strong Roots.  
**BENJ. GREY, MALDEN, MASS.**

## JAPAN LILIES, LILY OF THE VALLEY AND SPIREAS, NOW READY.

CURRIE BROS., Seedsmen and Florists,

108 Wisconsin St., and 312 Broadway, MILWAUKEE, WIS.

SEND FOR CATALOGUE.

## NEW CHRYSAETHUMS.

MRS. JOEL J. BAILEY, (carried off the Sun-  
spray cup for best seedling never before exhibited,  
Philadelphia, No. 3, 1887), white, gold and yellow.

MAGNET, large, very drooping, soft rose color.

KINNESS, deep rose.

GEORGE BULLOCK, bright rose, very large and double.

THE BRIDE, white.

STARS AND STRIPES, has appearance of being striped, large flower.

LUCREE, white.

MONT BLANC, enormous, white.

MARVEL, white with large maroon spot.

W. M. SINGERLEY, bright carmine.

MRS. MILL, buff, enormous, incurved.

PUBLIC LEADER, peaty pink, incurved.

MRS. ANTHONY WATERER, enormous white.

Price List ready January 1st.

H. WATERER,

56 North 38th Street, PHILADELPHIA.

## STORM KING.

The best FICUSIA ever introduced. It  
will have an immense run in 1888.

GENUINE STOCK—price, \$5.00 per 100; if by mail  
prepaid, \$1.00 per dozen.

## THE NEW SEMI-DOUBLE HELIOTROPE.

MRS. DAVID WOOD.

ITS MERITS—Novelty, lasting quality, immense  
size, sturdy growth, early bloomer. Price, 6 plants  
\$1.00 by mail, prepaid.

Address ELLIS BROS., Keene, N. H.

## RHODODENDRONS

Being the representatives in the U. S. for Messrs.

Jno. Watterer & Sons,

The great English Rhododendron growers, we are  
prepared to furnish Rhododendrons of all sizes and  
in any quantity, at prices lower than ever before  
offered in this country. Orders now solicited for  
spring delivery. Prices on application.

B. A. ELLIOTT CO. Pittsburgh, Pa.

ROTTED PEAT, FIBROUS PEAT, AND PACKING MOSS.

\$1.00 per Barrel.

Sphagnum Moss, \$2.00 per Bbl.

A discount of 25 per cent. on all orders of five barrels  
or upwards. Cash with orders.

THE BARNETT MOSS AND PEAT CO.,

BARNETT, NEW JERSEY.

## GREENHOUSE HEATING.

BY A. B. FOWLER.

Explains fully all the best systems of heating  
greenhouses by both hot water and low-pressure  
steam. Tells you the points to consider in selecting  
an apparatus. How to adjust same to various loca-  
tions; gives the results of the latest scientific ex-  
periments. Shows how to compute the number of  
feet of pipe required for a given space; draft and  
other important matters.

It is highly commended by Mr. John Thorpe and  
others. Postpaid, 75c.

Sent on receipt of price. Address,  
AMERICAN FLORIST,  
CHICAGO.

## BULBS, IMMORTELLES. J. A. DE VEER,

(Formerly of DeVeer & Boomkamp.)

19 Broadway, New York.

SOLE AGENT FOR

GENERAL BULB CO., Vogelzang, (Holland.)

LS. BREMOND FILS, Olliviers, (France.)

Offers to the trade, net without engagement:

Lily of the Valley (true Berlin pipe), per 1,000, \$10.00.

In original cases of 250, \$2.50. Per 100, Per 1000

Lilium Auratum, large bulbs,..... \$9.00 \$80.00

Excelsior Pearl Tuberoses, extra,..... 2.00 15.00

Gladioli Colvillii, "The Bride"..... 3.50 30.00

Cheice DITCH FORCING BULBS yet on

hand at greatly reduced prices:

Per 100, Per 1000

Mixed Hyacinths in four colors, sepa-

rate, double and single,..... \$3.00 \$25.00

Good named Hyacinths, 10 to 40 var.,..... 3.50 32.00

Picked Hyacinths, 20 exhibition var.,..... 9.00 80.00

Tulips, 12 fine foreign varieties, includ-

ing white and yellow,..... 1.50 12.00

Tulips, 12 best varieties,..... 2.00 15.00

"Duc van Thol, scarlet,..... 7.50 6.00

"Finest foreign mixture, single,..... 3.00 25.00

"double,..... 12.00 11.00

Narcissus in the sorts,..... 1.75 15.00

Jonquils, single, sweet-scented,..... 1.00 9.00

"double,..... 2.00 10.00

"Campanulles, single,..... 1.10 9.00

Crocus, in 5 separate colors, nr mixed,..... 2.50

Crown Imperials, finest mixed,..... 7.00

Star of Bethlehem, in fine forcing,..... 1.50

Iris, Spanish mixed,..... 4.00 3.00

"English,..... 1.00 8.00

Scillas, in sorts, white, pink, blue, etc.,..... 1.50

Anemones, single mixed,..... .01 5.00

"double,..... 1.25 10.00

Felceps, single or double,..... 2.00

Ranunculus, Persian mixed,..... .01 5.00

"Turban,..... .75 5.00

"French,..... .50 4.00

For other bulbs, grasses, cape flowers, milkweed

balls, sea onts, pampas plumes, etc., see price list,

mailed on application.

## EXTRA STRONG CLEMATIS

FROM THE

BOSKOOP HOLLAND NURSERY ASSOCIATION

Ready for immediate delivery.

Address

C. H. JOOSTEN,

Importer of Plants and Bulbs,

3 COENTJES SLIP, NEW YORK.

We have Fine Strong Plants of the  
following to offer to the trade:

	Per 100
Ageratum, 2 1/2 inch.....	\$1.00
Cinerarias, 3-inch.....	7.00
Calla Lilies, 4-inch.....	8.00
Rose Geraniums, 2-inch.....	2.50
B. Alyssum, 2-inch.....	2.00
Begonia Metellina, 2 1/2 inch.....	4.00
Ceraniums in Var., 2-inch.....	3.00
J. W. D. BLEY & SON, PARKERSBURG, W. VA.	

## DOUBLE WHITE PETUNIA,

MRS. G. DAWSON COLEMAN.

Endorsed by such florists as Dreer, Henderson and  
Hilliard, as the finest double white ever produced.  
Exquisite in shape, pure white in color. For floral  
work and bedding it has no equal. Mail, 5 for \$2;  
\$1.00. We also offer genuine stock of Tradescantia  
Multicolor at same price.

THOS. G. HAROLD, Kingston, Somerset Co. Md.

R. VAN DER SCHOOT & SON,  
WHOLESALE  
**BULB GROWERS,**  
HILLEGOM, HOLLAND.

**AUGUST RÖLKER & SONS,**  
44 Dey St., NEW YORK,  
Supply the Trade with  
**SEEDS, BULBS,**  
And all kinds of  
**FLORISTS' SUPPLIES.**

## NEW CROP SEEDS.

New crop of the following seeds is now ready. They will be sent postpaid on receipt of price.

**AMPELOPSIS VITICOLA.** (Crop 1887.) If this seed is sown at once it will make good salable plants for next spring's trade. One ounce contains twelve hundred seeds. Per trade pkt., 10 cents; per oz., 50 cents; per lb., \$5.00.  
**SMILAX** (*Mysophyllum Asparagoides*). (Crop 1887). Per trade pkt., 25 cents; per oz., \$1.75.  
**GERANIUM**, Apple-scented. (True). (Crop 1887). Per 100 seeds, 50 cents.  
**SALVIA SPLENDENS**. (Scarlet Sage). (Crop 1887). Per trade pkt., 25 cents; per oz., \$3.00.  
One packet of each of the above, post-paid, for \$1.00.

**ROBT. J. MALLIDAY,**  
SEEDSMAN AND FLORIST,  
BALTIMORE CITY, MD.

## DAHLIA \* \* \* \* ODORATA.

Sweet-scented Single Dahlia, very dark black-brown, excellent for fine floral work, offered in original roots, at  
\$2.50 EACH; 10 FOR \$22.50.

**J. SIEKMANN,**  
Kostritz (Thuringia), GERMANY.

### SPECIAL LIST.

Per 100	
Carnations, Hulse's White, 3-inch pots.....	\$2.00
Geraniums, uble, and sgd., 100 var. 3-in. pots.....	3.00
Roses, American Beauty, 3-inch pots.....	8.00
" Camoens, Perles, Souv. d'un Ami, 3-in.....	6.00
" S. de St. Pierre, The Bride, Sunset.....	6.00
Coleus, 24 varieties.....	3.00
Feverfew, Little Gem.....	2.50
Indra variegata, 3-inch pots.....	4.00
10,000 Roses, ass't, 3-inch pots.....per 1,000, \$25.00; 3,000	3.00

**A. GIDDINGS, DANVILLE ILL.**

## BULBS! BULBS! BULBS!

Before placing your order for HOLLAND BULBS write me for my trade list. I have made special arrangements with some of the largest growers in Holland, and can offer you TERMS and PRICES better than any other firm does. All orders over ten dollars will receive a credit until May 1, 1888. Write for terms and prices.

**E. HIPPARD, Youngstown, Ohio.**

### BEST HARDY RHODODENDRONS.

Azaleas, new Japanese Maple, Tree Peonies, Lilac Syringa Japonica, Frunus Pissardi, Hydrangea Paeunulata. Ampelopsis viticula, and all other choice HARDY Trees, Shrubs, Roses, etc., in any quantity at lowest rates.

COLLECTIONS OF BEST HARDY SHRUBS, very fine and cheap. Catalogues on application.

**FRED. W. KELSEY,**  
208 Broadway, NEW YORK.

### WESTERN FLORISTS.

Per 100	
VERBENAS, 30 best var. including Mammoth.....	\$2.00
GERANIUMS, 20 best var. double and single.....	2.50
ROSE GERANIUMS, including Dr. Livingston.....	3.00
COLBUS, 20 best var. for the West.....	2.50

All the above are strong and vigorous, ready to ship.

**N. S. GRIFFITH, Independence, Mo.**

(Independence is well located for shipping, being 8 miles east of Kansas City.)

A CIRCULAR OF DESCRIPTION, &C., FOR OUR

## New Tomato, "Volunteer,"

— AND —

## New "Carnation Striped" Zinnias,

Will be sent to the trade during this month, in time to insert in Spring Catalogues.

**V. H. MALLOCK & SON,**  
**QUEENS, NEW YORK.**



### READY NOW:

*Fine Lily of the VALLEY PIPS and SPIREA JAPONICA CLUMPS. Extra Fine TUBEROSE BULBS, PEARL and ITALIEN.*

### STILL IN STOCK:

HYACINTHS, TULIPS, NARCISSUS, ROMAN HYACINTHS, LILUM CANDIDUM, LILUM ACUTUM, LILUM RUBRUM, LONGIFLORUM, &C., &C.

### FOR THE HOLIDAYS:

HOLLY, BOUQUET GREEN, WREATHING, HOLLY WREATHS, PAMPAS PLUMES, IMMORTELES, &c., &c.

Send for Catalogue and Special Holiday List.

**JAMES KING,**

170 LAKE ST., CHICAGO.

**F. E. McALLISTER,**

— WHOLESALE DEALER IN —

Seeds For the Florist Market, Gardener and Farmer. Requisites Such as Baskets, Immortelles, Grasses, Mosses, Bouquet Papers, Pampas Plumes, etc. Bulbs For the Greenhouse or Garden.

22 Dey Street, - - - NEW YORK.

## GRAND \* STOCK \* PLANTS.

### MAMMOTH VERBENAS

(One plant of which now, is worth ten in January.)

12 finest selected market sorts, \$3.00 per 100; \$25.00 per 1,000; embracing best contrasting colors.

**GERANIUMS**—12 best double market sorts, \$6.00 per 100; \$50.00 per 1,000.

**PRIMULAS**—Single, six distinct colors, \$6.00 per 100; \$50.00 per 1,000.

**SMILAX**—\$4.00 per 100; \$30.00 per 1,000.

NEW WHOLESALE LIST SENT ON APPLICATION.

## PETER HENDERSON & Co.,

35 and 37 Cortlandt Street, NEW YORK

IT is a conceded fact that there is no better place in the U. S. for Nurserymen to sort up, Dealers to Pack, or Planters to order, than at the Painesville Nurseries, the aim of



THE STORRS HARRISON CO. being to carry a full line of Fruit and Ornamental Trees, Bulbs, Shrubs and Roses. Have a remarkably fine stock of Standard and Dwarf Pears, Kilmarnock Willows and other Weeping Trees; also Grape Vines, including all the Best New Sorts—Moore's Diamond, Empire State, Niagara, Jessica, Frances B. Hayes, etc. Can supply car loads of elegant, large Nursery-grown Elms, Catalpas, Maples, Poplars, Tulips, etc. The



handsomest lot of Pyramidal Arborvitae and Irish Juniper ever offered, and acres on acres of other Evergreens. Prices reduced to suit the times. Come and see. Correspondence solicited. Catalogue Free. 33d Year. 700 Acres. 24 Greenhouses.

Address **THE STORRS & HARRISON CO., PAINESVILLE, LAKE CO. OHIO.**



## Trade Notes.

WASHINGTON.—Fire at the Industrial Home school on Dec. 1 caused a loss of \$700 on building and \$600 on plants.

LEAVENWORTH, KAN.—W. H. Rose is building three new rose and carnation houses at the city limits.

KANSAS CITY.—C. E. Hampton has purchased ten acres of land in Wyandotte and expects to erect several greenhouses on it next spring.

BALTIMORE.—New stores have been opened by R. Schmidt and Ernest Frederick; the first on Frederick road and the second on Baltimore street near Broadway.

STEUERENVILLE, O.—W. G. Huscroft has built two new houses—a rose house 100 x 24, and a carnation house 100 x 16. O. A. Lobinger will remove to California Jan. 1 next, where he will locate permanently.

BOSTON.—Welch Bros. have added an adjoining basement to their former roomy place. They have built a large vault 20 x 24 under the sidewalk, where they keep their stock of flowers, discontinuing the use of ice boxes.

ALLEGHENY CITY, PA.—Ludwig Richter has completed three new houses, 66 x 18 each. Hartman Bros. have nearly finished three houses, one 66 x 12, and two 78 x 20 each. Fred Burki has in course of erection two houses 100 x 20 each, the walls of stone, and to be heated by natural gas.

WASHINGTON.—At a recent dinner tendered to Mr. Jos. Chamberlain, a member of the English fisheries commission, the floral decorations were almost entirely of orchids. The central decoration of the table was a bank of orchids and ferns six feet long and three wide. Many ferns and tropical plants were used about the rooms.

WHEELING, W. VA.—Louis Smith has built a new house 72 x 14. Theo. Schreiber is now heating three of his houses with natural gas, with a saving of 75 per cent. over coal. Mr. Schreiber is quite ill with inflammation of the lungs. W. F. Zane has just completed a fine 2-story residence in connection with his greenhouses.

DETROIT.—At the Shelden-Alger wedding, which occurred on the 8th inst., many flowers and handsome floral decorations were seen. The ceremony was performed in a bower of roses veiled by smilax entwined with the same flowers. At the back and sides were banks of tropical plants. A large design was a monogram of the letters S and A of camellias and red carnations fringed with smilax. Cupid's bow and shaft and the nuptial knot were also neatly worked out with a variety of blossoms. S. Taplin furnished the decorations.

ALLEGHENY CITY, PA.—The elegant conservatories recently constructed in the Allegheny Park, the gift of Mr. Henry Phipps, Jr., were formerly turned over to the city Nov. 24. The cost of the buildings was \$36,803, the entire amount being donated by Mr. Phipps. The new conservatories cover a space 140 x 80; and in addition there are the superintendent's office, workrooms, hall and corridor. Superintendent Hamilton's office is luxuriously furnished and he naturally takes considerable pride in the beautiful plant houses, now under his control.

BOSTON.—Will the absent-minded party who mailed us a subscription dated Boston, Dec. 6, without giving name or address, and in a plain envelope, please supply the missing details, so that we can fill the order? The note was written on what was apparently the lower portion of a small statement head, the printed head having been torn off. We receive many subscriptions for which we have to obtain the address from the postmark, but have never before had a case where every clue to the sender had been so carefully obliterated.

PITTSBURG.—E. W. Williams has built two new houses, 80 x 24 each. J. W. Elliott's new store at 8½ Sixth street is elegantly fitted up. At a recent funeral a floral design was a boat, six feet long and four high, being patterned after the one belonging to the boat club of which deceased was a member. The hull was principally white carnations, the cabin windows and doors being the same flower in other colors; the stern was of *Encharis amazonica*, and the anchor and chains of purple immortelles; the whole rested on a base of roses, ferns and lily of the valley. The name of the club was lettered on the hull. There were 4,600 carnation and 400 roses, in addition to large quantities of ferns and lily of the valley, used in its construction by florist Robert C. Patterson, who designed it.

CINCINNATI.—Roses are coming in very fine for this time of the winter. What the florists are worrying about is the scarcity of purchasers. Roman hyacinths and narcissus are the popular flowers of the moment. A pretty floral cradle was made by the Floral Co. for a newly arrived babe. The canopy was of pansies, violets and ferns, and the body of rosebuds, bouvardia, daisies and a few chrysanthemums. Ribbon was gracefully looped over the design. Frank Huntsman filled a novel order the other day—decorated a house with plants for a funeral! At a dinner given to a young man who rejoices in the name of "Jumbo" the table was decorated with a floral elephant, a creation of the Floral Co. The body was of white carnations and the tusks of stalks of calla lilies.

HOLIDAY PRICES.—A daily paper which has been investigating as to the probable price of flowers—and especially roses—at the holidays, concludes its report with the following comment: "The unsophisticated young lady who measures male devotion by the presents she receives, will, if she reads this article, probably regard the admirer who sends her 'only some roses' with a considerably increased tenderness. Barring diamonds and sealskin saccques, the young man can blow in more money on roses than anything else in the line of presents suitable for the fair ones." The same paper irreverently speaks of the florist's customer as "paying \$5 for a handful of color and thorns."

## LILY OF THE VALLEY.

Headquarters for best forcing tips.

— FOR PRICES, ADDRESS —

AUGUST RÖLKER & SONS,

P. O. BOX 899, NEW YORK.

Mention American Florist.

GROWTAGE'S PATENT  
BUILDING FOR HORTICULTURE

— GLAZED WITHOUT PUTTY. —  
Endorsed by the New York Horticultural Society.  
Illustrated Circular mailed on application.  
Plans and estimates given for every description of Horticultural Buildings.

H. J. GROWTAGE,  
76 Myrtle Avenue, BROOKLYN, N. Y.

## Challenge Ventilating Apparatus,



Without a rival, either in cost, ease of operating, speed or security in case of storms.

Over 600 Sold the First Year, and all giving perfect satisfaction.

It will pay parties contemplating building, or in need of apparatus on houses already built, to correspond with us before buying any other kind.

Please send the following dimensions:  
1. Give the length of house.  
2. Number of sashes to be lifted.  
3. Give the length and depth of sashes.  
4. Give width and thickness of rafter or sash bar.  
5. The height from the walk to the comb of roof.  
Address all communications to

QUAKER CITY MACHINE CO.,  
1108 & 1110 North E St., RICHMOND, IND.



## Florist's Letters

Patent applied for.  
These letters are made of the best immortelles, wired on wood or metal frames with holes to insert root-picks.

Prices on Wood Frames:

24 in. Purple... Per 100 \$3.00

Less than 100, 35c.

24 in. Purple... Per 100 \$4.00

Send for sample. Postage

10c. per 100. Script lettering

on Metal Frames any

word, 8c. per letter.

Designs, Monograms, etc.

W. C. KRICK,

1107 Broadway, Brooklyn

N. Y.

J. C. VAUGHAN, Chicago,

Ag't. 7281 of Pennsylvania

ENGRAVING DIRECT FROM  
PHOTOGRAPH  
NO DRAWING REQUIRED.

NO HAND WORK NECESSARY.

SEND COPY **CHEAP, ARTISTIC**

FOR ESTIMATE. CROSSCUP & WEST ENG. CO.

907 FILBERT ST. PHILA. PA.

## THE NEW ROSE-COLORED VIOLET

Mme. Millet.

A first-class novelty; perfectly healthy; very profuse flowering, and sweeter than any in cultivation. PRICE, 3-inch pots, each 40c.; doz. \$3.00; 100 \$15.00.

J. COOK, 318 CHARLES ST.,  
BALTIMORE, MD.

## TOBACCO STEMS FOR FLORISTS,



FOR SALE, packed in  
bales 200 to 250 lbs.

No CHARGE for deliv-  
ering to depots.

## PRICE:

From \$3 to \$10 per ton,  
according to quanti-  
ties.

ADDRESS

P. C. FULWEILER,  
716 Arch Street, PHILADELPHIA, PA.  
Mention American Florist.

## CHINESE



## PRIMROSES

—)o(—

200 ALBA, 50 ALBA FILICIFOLIA

In fine condition, showing bud, 3½-inch  
pots, per hundred, \$8.00, to close.

EDWARD W. BREED,

CLINTON, MASS.

## GERANIUMS.

Twenty of the best varieties for bedding or market  
purposes, at \$5.00 per hundred, \$40 per thousand.

## VERBENAS.

Twelve best and most distinct varieties, \$3.00 per  
hundred; \$25.00 per thousand. Rooted cuttings  
\$7.00 per thousand. Fine strong plants of

*Alternanthera* par. major, *Ampelopsis Veitchii*,  
*Myrtus Multiflorus*, *Myrtus Communis*,  
and *Smilax*.

Prices given on application.

HOLZNAGLE &amp; NOEL,

Whitewood P. O., Mich., (near Detroit.)



SOLD BY SEEDSMEN.

100,000

Well Rooted Cuttings of Verbenas and Carnations.

VERBENAS. The very best 8 selected from the  
Mammoth set, also 16 of the best of the older and  
best leading varieties.

CARNATIONS. The new Lyons Whites, pure  
white and good winter bloomer. My own raising,  
very prolific and early, also about 15 of the older and  
best leading varieties.

Send for circular and price list and convince your-  
self how cheap you can buy good strong and healthy  
plants of the above.

FRED SCHNEIDER,

WHOLESALE FLORIST,

ATTICA, Wyoming Co., N. Y.

Delegates to the next  
convention will travel  
via the  
PULLMAN CAR LINE



TO AND FROM  
Louisville, Indianapolis, Cin-  
cinnati and the winter re-  
sidents of Florida and the  
South. For full information  
address  
E. O. McCormick, Gen. Passenger Ag't, Chicago.

My WHOLESALE AND DESCRIPTIVE Catalogues  
for 1887, of Bedding Plants, Roses, Palms, Orchids,  
etc., mailed to all applicants. Large stock of the  
following on hand at cheap rates: *Ampelopsis Veitchii*, various sizes Tea, and Hybrid  
Roses, all the leading sorts, named *Chrysanthemums*, *Dracæa Indivisa*, various sizes,  
*Echeverias*, *Small Ferns*, *Geraniums*, double and single, best named sorts, *Areca Lu-  
tescens*, in 2½, 4, 5, and 6-inch pots, *Latania Borbonica*, *Scaevola Elegans*, *Oreo-  
dora Regia*, *Corypha Australis*. Other Palms, such as *Cocos Weddelliana*, *Cham-  
erops Excelsa*, *Phoenix Reclinata*, *Phoenix Rupicola*, *Phoenix Tennis*, *Kentias* of  
sorts. *Glazinova Insignis*, fancy named *Clematis*, and other vines, etc. Prices given  
on application.

WM. C. WILSON, FLORIST,

Steinway's, Astoria L. I.

## NEW WHITE CARNATIONS,

WM. SWAYNE AND L. L. LAMBORN.

The two best white carnations ever offered. EARLY, FREE AND CONTIN-  
UOUS BLOOMERS. Stock of these excellent sorts will be ready March 1st, 1888.  
Orders booked now, and filled strictly in rotation as received, Price, \$25.00 per 100.

Send 5c. Stamp for Sample Florets.

Wholesale price list of rooted cuttings of other leading sorts ready Jan. 1st.

WILLIAM SWAYNE, Kennett Square, Pa.

## ROSES AND CARNATIONS.

We offer a large stock of YOUNG ROSES, both new and old sorts, from 2½-inch  
pots. Also CARNATIONS of best varieties for forcing and budding.

## 10,000 IMPORTED RHODODENDRONS

Of hardest and best varieties imported last year, which have grown well and are  
well set with bloom-buds. We can supply these fine plants for less than they can be  
imported in small lots.

MOON FLOWERS.—Fine young plants at low rates.

PAPA GONTIER.—3-inch, 4-inch and 5-inch pots, very fine plants.

MERMETS.—4-in., fine. LA FRANCE.—4-in., fine. BRIDES.—4-in., fine.

WE CAN DELIVER ON AND AFTER JANUARY 1st, 1888.

Write for Prices.

B. A. ELLIOTT CO.,

PITTSBURG, PA.

## NEW BEGONIA

SEMPERFLORENS GIGANTEA ROSEA

\$1.50 per doz.; \$8.00 per 100; \$75.00 per 1,000.

A general Florist Stock low. Send for  
wholesale price list.

C. H. MURPHEY,  
URBANA, O.

## CHRYSANTHEMUMS.

OVER 100 VARIETIES.

Send for Catalogue, ready in January.

GERANIUMS, fine plants in bloom, 4-inch pots, \$6.00  
per hundred, to make room.

H. L. PHELPS,  
SPRINGFIELD, ILL.

## PLANTS FOR FLORISTS

Geraniums, double and single.....	Per 100	\$2.50
Coleus.....	do	2.50
Verbenas, Mammoth included.....	do	2.50
Heliotropes.....	do	3.00
Roses, Monthly.....	do	3.00
200 or more.....	do	2.50

Healthy stock and leading sorts.

HANS NEILSON, St. Joseph, Mo.

## FOR SALE OR EXCHANGE

For other stock needed, balance of our Swanley  
White Violets, \$2.00 per 100, or \$15.00 per 1,000; Marie  
Louise \$2.00 per 100. Pansy plants out of seed bed,  
\$1.00 per 100, \$8.00 per 1,000. Pansies transplanted,  
\$1.75 per 100, at

M. TRITSCHLER &amp; SONS,

Hyde's Ferry Gardens.

NASHVILLE, TENN.

THE BEST AND CHEAPEST  
DOUBLE PETUNIA SEED

(P. hybrida grandiflora fl. pl.)

In the market. For sale to the trade by the grower.

G. A. McTAVISH,  
NORTH SAANICH, B. C., CANADA.

## GLADIOLUS.

Mixed and Choice Named Varieties, by the  
dozen or thousand.

Send for prices; also for Wholesale Price List of

ORNAMENTAL NURSERY STOCK.

SAMUEL C. MOON,

Wholesale Nurseryman and Gladiolus Grower,  
MORRISVILLE, BUCKS CO., PA.

## CUT-FLOWERS AND PLANTS

The coming season from twelve of the best varie-  
ties of ROSES, including Puritans;

— ALSO —

CARNATIONS, BOUVARDIAS, CALLAS, EUCHARIS,  
and most bulbous flowers, etc.SMILAX, ASPARAGUS and LYGOLOM SCANDENS  
(climbing fern). Also young plants of above.Palms, Crotons, Dracenas, Ferns, and  
general Florist's Stock, in large quantities.

WASHINGTON, D. C. NURSERIES,

N. STUDER,

ANACOSTIA P. C., D. C.





on application. **THOS. G. HAROLD,**  
**KINGSTON, Somerset Co., MARYLAND.**



## Duty on Bulbs.

Mr. W. Langstaff of Indianapolis, writes us that as per a suggestion made at the last meeting of the S. A. F. he wrote the congressman for his district in regard to the duty on bulbs and has received the following reply:

WASHINGTON, D. C., Nov. 27, '87.  
Wm. Langstaff, Esq., Indianapolis, Ind.:  
DEAR SIR:—Yours of 24th inst. at hand and contents noted. I will cheerfully support the measure you mention. It is probable that some decisive action will be taken the coming session.  
Respectfully,  
W. D. BYNUM

Mr. Langstaff scores a point when he says that if every florist in the society—or out of it—would also write their congressman, they will greatly aid the committee of the S. A. F. and expedite matters considerably.

A HANDSOME FERN CATALOGUE—The catalogue of Messrs. W. & J. Birkenhead, fern nursery, Sale, near Manchester, England, is no doubt the most complete catalogue of ferns published. Any one interested in ferns should have it.

An International Convention and Exhibition of Horticultural products will be held at Brussels in 1888. Full information as to details may be obtained from the American agents, Armstrong, Knauer & Co., 822 Broadway, New York.

ONLY POTTERY MAKING A SPECIALTY OF

## FLOWER POTS FOR FLORISTS.

THE WHILLDN POTTERY CO.,  
713 & 715 WHARTON ST.,  
PHILADELPHIA.

## Syracuse Pottery SMASHES PRICES OF POTS.

Thumbs.....\$2.54 No. 3 Rose. \$3.70 1 3/4-inch.....\$6.29  
2 1/4-inch..... 3.03 No. 2 Rose. 4.00 1 1/4-inch..... 7.50  
2 1/2-inch..... 3.57 No. 1 Rose. 4.53 1 1/2-inch..... 10.83  
3 1/2-inch..... 4.78 Special 3-in. 4 1/2 1 1/2-inch..... 13.75  
Above prices per 1,000, good till Jan. 15th, all packed and delivered free on board cars. We ship all over U. S. Free samples with first crate. Order a trial crate. Add 10c. if you send check. Write for frt. rates and list of prices at which we pack to foreign countries. The rate to Liverpool is 16c., Toledo or Detroit 10c., Chicago 20c., St. Louis 25c., Memphis 35c., Mobile 42c. Crates weigh 300 lbs. State the amount and sizes you need. At the very low prices above quoted we sell only in our

### READY PACKED CRATES

shipped at buyer's risk and freight; cash with order.  
PRICES BY THE CRATE: 3,150 Thumbs, \$8.00;  
2,625 2 1/4-inch, \$ 8.00; 1,500 No. 3 Rose, \$ 7.00;  
1,875 2 1/2-inch, 7.25; 1,000 No. 2 Rose, 6.40;  
1,125 3-inch, 5.50; 1,500 No. 1 Rose, 6.50;  
875 3 1/2-inch, 5.50; 1,300 special 3-in., 6.00;  
700 4-inch, 4.75; 320 5-inch, 4.40;  
300 4 1/2-inch, 3.90; 100 6-inch, 3.50.

J. N. PERKINS, Manager, Syracuse, N. Y.

### HAND TURNED POTS From HILFINGER BROS.' POTTERY, FORT EDWARD, N. Y.

PRICES PER HUNDRED:  
2-in. 40c., 2 1/4-in. 35c., 2 1/2-in. 35c., 3-in. 35c., 4-in. 35c., 4 1/2-in. \$1.85,  
5-in. \$2.20, 7-in. \$1.00, 8-in. \$1.00, 9-in. \$1.00, 10-in. \$1.10,  
12-in. \$2.50, 14-in. \$3.00. Cylinders for Cut Flowers,  
10x3 1/2, 10x5 1/2, 10x7 1/2 per doz. We pack in cases which are very strong. No charge for packing. Our pots are well burnt and strong. TERMS CASH. Address  
HILFINGER BROS., Fort Edward, N. Y.

## HALES' MOLE TRAP

For destroying ground moles in lawns, parks, gardens and cemeteries. The only PERFECT mole trap in existence. Guaranteed to catch moles where all other traps fail. Sold by seedsmen, Agricultural Implement and Hardware dealers, or sent by express on receipt of \$2.00 by H. W. HALES, RIDGEWOOD, N. Y.



## FOR THE TRADE. FLORAL WIRE DESIGNS.

JAS. GRIFFITH,

THE PIONEER MANUFACTURER IN THE WEST,

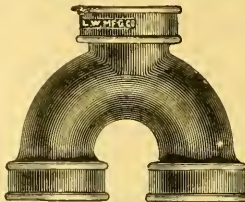
305 Main Street.

CINCINNATI, OHIO.

SEND FOR WHOLESALE PRICE LIST.



## Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

### GET THE BEST!

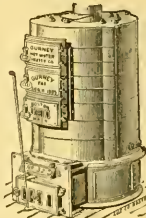
Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

Mention American Florist.

L. Wolff Mfg. Co., 93 to 111 W. Lake St. CHICAGO

## GURNEY'S NEW HOT WATER HEATER.

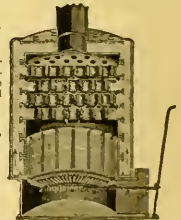
THE CHEAPEST AND BEST FOR  
Greenhouses, Conservatories and  
DWELLING HOUSES.



THE GURNEY HEATERS present more water surface to the direct action of the fire than any others (known to us) in use. They are the easiest to keep clean, and with due attention almost any kind of fuel may be used.

EASILY REGULATED.  
SIMPLE AND EFFICIENT  
SAFE AND ECONOMICAL.

Manufactured by the  
GURNEY HOT WATER HEATER CO.,  
237 FRANKLIN STREET, BOSTON, MASS.



JOHN A. FISH, Managing Director.  
SEND FOR PAMPHLET AND PRICE LIST.

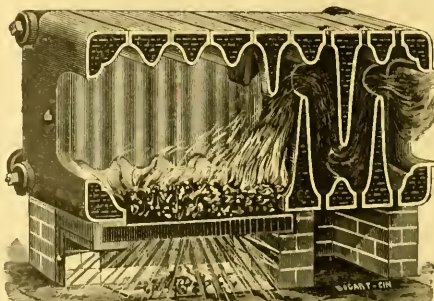
SELLING AGENTS:—M. H. Johnson, 140 Center Street, New York. Rice & Whitcomb Mfg. Co., 42 and 44 W. Monroe Street, Chicago (West and Southwest). T. K. Chase, 31 Edmund Place, Detroit, Mich. (for Michigan and Ohio). Wm. Gardiner & Co., Portland, Oregon.

The Best Boiler now made is the

## CARMODY

### Sectional Extension Return Flue Water Heater

And we can prove it.



Send for the new edition "How to Heat a Greenhouse with Hot Water by High or Low Pressure." PRICE, 50 CENTS. Send for Descriptive Catalogue.

J. D. CARMODY, FLORIST, EVANSVILLE, IND.

Mention American Florist.





## Index to Advertisers.

Advertising Rates, etc.	211	King, James, .....	215
Allen, S. L., & Co., .....	212	Krick, W. C., .....	216
Allen, W. S., .....	211	La Roche & Stahl, .....	211
Barnegat Moss & Peat, .....	214	Leavenworth & Burr, .....	211
Co., .....	214	Lee & Son, .....	215
Batty, J. H., .....	213	McAllister, F. E., .....	215
Bayersdorfer, M. M. & .....	213	McCarthy, N. F. & Co., .....	211
Co., .....	213	McFarland, J. Horace, .....	219
Bell, W. T., .....	219	McFaysh, G. A., .....	217
Benz, Albert, .....	219	Maish, N., .....	211
Berger, H. H., & Co., .....	219	Mare, Gabriel, .....	209, 218
Blanc, A., .....	212	Mechwart, Wm., .....	221
Bonsall, Jos. F., .....	209, 218	Merrill, J. H., .....	219
Boynton, W. D., .....	213	Michel Plant & Seed Co., .....	219
Boyson Jas. L., .....	219	Miller, Geo. W., .....	221
Brace, L. B., .....	213	Monson House, .....	217
Broad, Edw. W., .....	217	Moon, Samuel C., .....	217
Bruee, W. A., & Co., .....	212	Mullen, Geo., .....	211
Carnduff, J. D., .....	220	Murphy, C. H., .....	217
Coles, W. W., .....	219	Myers & Co., .....	217
Cook, J., .....	217	Nanz & Neuner, .....	218
Critchell, B. P., & Co., .....	219	Nielson, Hans, .....	217
Crescup & West Eng. Co., .....	219	Noorse, H. B. & Co., .....	213
Curie Bros., .....	211, 214	Olmstead, L. H., .....	218
Desmond, Wm., .....	218	Pennock, Chas. B., .....	211
De Veer, J. A., .....	214	Perkins, J. N., .....	220
Dilling, Peter, .....	221	Phelps, H. L., .....	217
Diez, John L., & Co., .....	221	Pienty, Josephus, .....	221
Dillon, J. L., .....	218	Price, Charles S., .....	217
Dorr, H. A., .....	212, 218, 219	Quaker City Machine Works, .....	216
Emley, J. W. & Son, .....	214	Reed & Keller, .....	221
Elliott, B. A., Co., .....	214, 217	Reinemann, A. R. & Bro., .....	218
Ellis Bros., .....	214	Rochers, Theo., .....	211
Exeter Mach. Works, .....	222	Roemer, Frederick, .....	219
Fassett, F. E. & Bro., .....	219	Rolker, A. S. & Son, .....	219
Fink & Co., .....	219	Ross & Millang, .....	211
Fulweiler, P. C., .....	217	Schneider, Fred, .....	217
Giddings, A., .....	215	Schaltheis Bros., .....	219
Goldman, M., .....	222	Schulz, Jacob, .....	219
Gregory, Jas. J. H., .....	212	Scolley, John A., .....	211
Grey, Ben., .....	214	Sheridan, J. H., .....	211
Griffith, Jas., .....	219	Sibley, Hiram, & Co., .....	212
Griffith, N. S., .....	215	Siehrman & Wadley, .....	219
Grove, Henry, .....	219	Siekman, J., .....	215
Gurney Heater Co., .....	220	Simmons, W. F. & Co., .....	219
Hales, H. W., .....	220	Sitadons, Wm. H., .....	219
Halliday, Robt., .....	219	Starr, Chas. T., .....	219
Hallcock, V. H. & Son, .....	215	Stearns, N., .....	211
Hammond & Hunter, .....	211	Stewart, Wm. J., .....	211, 215
Hammond's Slug Shot, .....	211	Stinson, E. A., & Co., .....	222
Harold, Thos. G., .....	214, 219	Stowers & Harrison Co., .....	215
Henderson P. & Co., .....	215	Strauss, C. & Co., .....	211
Hendrick, Jas., .....	219	Studer, N., .....	217
Herr, Albert M., .....	213	Swaney, Wm., .....	219
Hieble, Ad., .....	218	Thompson, G. & Sons, .....	219
Hickey, Henry G., .....	219	Trichter, M., & Son, .....	217
Hilfinger Bros., .....	220	Tucker, A. C., .....	219
Hill & Co., .....	215	Van der Schoot, R. & Son, .....	215
Holward, E., .....	215	Vaughan, J. C., .....	211, 213
Hitchings & Co., .....	221	Waterer, H., .....	214
Holmes & Noel, .....	219	Weaver, Thos. W., .....	217
Hooker, H. M., .....	222	Weich Bros., .....	219
Hurff, Freeman, .....	212	Whitlind Pottery Co., .....	220
Ives, J. H., .....	222	Wilks, S. Mfg. Co., .....	222
Jewett, Z. K., .....	219	Williams H. W. & Sons, .....	218
Joosten, C. H., .....	212	Wilson, Wm. C., .....	217
Kary, Geo. A., .....	212	Wolfe, Mfg. Co., .....	220
Kaufmann F., .....	213	Wood, J. C. & Bro., .....	218
Kelsey, F. W., .....	213	Young, Thos. Jr. & Co., .....	211
Kennett Bros., .....	211	Zirngiebel, D., .....	213

**COLDWATER, MICH.**—L. Price has built a fine new greenhouse and repaired the old ones, making one of the best establishments here.

## Ives' Putty Machine.

Patented Jan. 8, 1887.

The best device ever invented for laying putty. With this you can make old leaky sash perfectly tight without removing the glass. It will do the work of five men in bedding glass.

Sent by Express on receipt of price, \$3.00.

**J. H. IVES, DANBURY, CONN.**

**PIPE AND FITTINGS FURNISHED**

—TO—

**PLANS AND SPECIFICATIONS.**

Contracts solicited for

**HEATING GREENHOUSES.**

Most improved plans.

**ALL WORK GUARANTEED.**

Prices furnished on application.

**E. A. STIMSON & CO.,**

No. 22 and 21 Sears Street,

**DAYTON, OHIO.**

**ATOMIZER & SPRINKLER SELLS ON ITS**

Own Merits.

Spray appears like fog. Best sprinkler in the world. Sprinkles so even. Excellent for window gardening, flowers & house plants. Moistens them as if by a fog. Unequalled for destroying insects. Fills instantly; its uses impossible to describe here. Enclose stamp for name, price and price to agents. Remember, no stamp, no attention. **M. GOLDMUN, Patentee, Pittsfield, Mass.**



Sectional View.

Mention American Florist.

## IMPROVED BOILERS

FOR HEATING

## GREENHOUSES

GRAPERIES, POULTRY HOUSES, ETC.

ALSO FOR HEATING

WITH HOT WATER UNDER PRESSURE.

VENTILATING APPARATUS

For Raising Sashes in Greenhouses.

**GALVANIZED SCREW EYES**

And Wire for Trellis Work.

Send for Catalogue.

**Thos. W. Weathered,**  
46 & 48 MARION ST., N. Y.



## HEATING APPARATUS

FOR

**Greenhouses, Etc.**

**CAST IRON PIPE AND FITTINGS.**

**JOHN A. SCOLLY,**

74 & 76 Myrtle Ave.,

Brooklyn, N. Y.



## Improved Hot Water Boilers

For Heating

**Greenhouses, Graperies,**

**CONSERVATORIES, ETC.**

ALSO

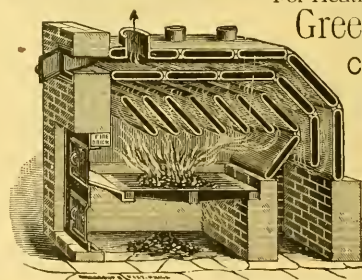
Cast Iron Pipe, Fittings, Valves and  
all Material for Heating by  
Hot Water.

Send for Catalogue.

**MYERS & CO.**

1173 So. 9th St.,

**PHILADELPHIA.**



## GREENHOUSE HEATING

BY STEAM, BY HOT WATER, BY COMBINATION STEAM AND WATER.

**EXETER MACHINE WORKS,**

19 FEDERAL ST., BOSTON, MASS.

**WORKS-EXETER, N. H.**

## THE CELEBRATED WILKS WATER HEATER!

For Heating

**GREENHOUSES,**

**DWELLINGS,**

**POULTRY HOUSES,**

**STORES, BATH TUBS,**

**ETC., ETC.**

Send for Price List.

**S. Wilks Mfg. Co.,**

Cor. Monroe & Clinton Sts., Chicago



ALL SIZES OF SINGLE AND DOUBLE THICK

**GLASS FOR GREENHOUSES.**

ALL GLAZIERS' SUPPLIES.

Write for Latest Prices.

# THE AMERICAN FLORIST



America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. III.

CHICAGO AND NEW YORK, JANUARY 1, 1888.

No. 58.

## THE AMERICAN FLORIST

Copyright, 1887, by American Florist Company.  
Entered as Second-class Mail matter.  
Published on the 1st and 15th of each month by  
**THE AMERICAN FLORIST COMPANY.**  
GENERAL OFFICES, 54 La Salle Street, Chicago.  
EASTERN OFFICE,  
Room 81, Vanderbilt Building, New York.  
All communications should be addressed to the  
general office at Chicago.

SOCIETY OF AMERICAN FLORISTS.—E. G. Hill,  
Richmond, Ind., president; John N. May, Sum-  
mit, N. J., vice-president; M. A. Hunt, Terre  
Haute, Ind., treasurer; Wm. J. Stewart, 67 Brom-  
field street, Boston, Mass., secretary. The fourth  
annual meeting at New York, Aug. 17, 18, 19,  
1888.

HAVE YOU renewed your sub. for 1888?

THE EXECUTIVE COMMITTEE of the S. A. F. meets in New York City on the 17th inst., to arrange a programme for the convention of 1888.

### For Reduced Postage.

The United States Postal Improvement Association has been organized for the purpose of securing reduced postage on seeds, plants, bulbs and cions; the reissue of fractional currency for use in the mails; the abolition of postal notes, and the issue of money orders for \$5, or less, for a fee of 3 cents. Wm. Penn Nixon, publisher of the Chicago *Inter-Ocean*, E. G. Hill, president S. A. F., James Vick, of the Seed Trade Association and J. J. Harrison, of the Nurserymen's Association, are among the officers; Herbert Myrick, Springfield, Mass., is secretary.

The plan of the association is to induce everyone interested to write letters to their representative and senator, and in addition, secure signatures to petitions to congress, the blank petitions to be furnished by the association. Blank petitions and a printed form of a letter to congressmen as a suggestion to those who will write their representative may be obtained free on application to Secretary Herbert Myrick, Springfield, Mass.

SUBSCRIPTIONS for the AMERICAN FLORIST may be left with any of the following:

Baltimore,  
R. J. Haliday.  
Boston, W. J. Stewart.  
Buffalo, Daniel B. Long.  
Cincinnati,  
Harry Sunderbrnch.  
Cleveland, O.  
Mrs. E. C. Campbell.  
Detroit,  
J. Breitmeyer & Sons  
Hamilton, Ont.,  
Webster Bros.  
Harrisburg, Pa.,  
J. H. H. McFarland.  
Louisville,  
George Thompson & Sons.

New Orleans,  
H. A. Despresmier.  
Philadelphia,  
Edwin Lonsdale.  
New York, W. S. Allen.  
Aug. Rolker & Sons.  
C. H. Joosten.  
Pittsburgh,  
J. R. & A. Murdoch.  
St. Louis, Michel Plant  
& Seed Co.  
San Francisco,  
Thos. A. Cox & Co.  
Toronto, Ont.,  
J. A. Simmers.  
Washington, D. C.,  
L. Schmid & Sons.

### Notes and Comments.

The Florists' Club held its most interesting meeting so far on Dec. 14, when Mr. J. H. Taylor's paper on "Chemistry in Agriculture" was read and discussed. Both the essay and debate are to be printed and distributed for the benefit of those interested in the scientific side of garden matters; most probably they will also figure in the FLORIST. Mr. Taylor has begun a series of experiments in chemical horticulture, so we are likely to hear from him again on the subject. It was the general opinion of the meeting that more exact knowledge on the subject would be of infinite value; it would enable the grower to use fertilizers strictly according to the needs of the flowers, instead of merely doing it on general principles.

Perhaps when we have learned the science of fertilizers we shall know how to persuade Perles to flower well. These roses are generally poor again this winter; too many of them are bull-headed and malformed or off-color. The most apparent cause is that the stock was weakened by over-forcing or similar causes until it lost its stamina, and then over-fed with gross stimulants until the plants became bilious. A plant may easily enough have its digestion impaired, as Mr. C. L. Allen may perhaps tell us at the next meeting of the club, when he is to read a paper on "Plant Physiology." Boston was represented at the last meeting by Messrs. Stewart, Norton and Baker; Philadelphia by Messrs. Cartledge and Westcott. Cooper Union is the next meeting place of the club.

On the 17th Mr. Jas. R. Pitcher gave a horticultural reception at Short Hills, entertaining a large party of well-known growers with a luncheon and an inspection tour of his fine place. All his guests express much enthusiasm over their visit; it was as enjoyable socially as it was interesting professionally.

Apparently that section of New Jersey which has been devoted chiefly to the rose-growing interest will become the Mecca of the orchid fauciers. There are some fine private collections in that district, and the commercial collections are increasing in size and number. Messrs. Sanders of St. Albans, England, are going to establish a branch in this country, which will most probably be at Summit; they intend building there. This branch will be in part a receiving station for new importations.

Somehow the state of the flower market makes the growers feel rather pensive just now. It is not altogether exhilarating, ten days before Christmas, to find that it is easier to sell Mermets for \$2 a hundred than for \$10. Some very good ones reached the latter figure, but the average was much below it. Violets ought to bring a high figure, as the dis-

case has lessened production, and some went up to \$2.50 a hundred, but they were astonishingly large flowers; the average price was 50 cents. Roman hyacinths were a positive drug; the street vendors had regular stacks of them—always a criterion as to a flower's cheapness. Mermets and narcissus were plentiful on the street, but there was no lily of the valley to be seen out of the florists' stores. Lily was comparatively scarce and bringing \$8 a hundred. It looks as if the bulb growers would not realize a vast fortune unless they flowered an immense quantity of stuff.

There must be an unusual quantity of stuff in the market, for the Patriarchs' ball, which usually causes a regular dearth of flowers, made scarcely any impression. It may be that large decorations will consist more of plants than cut flowers; it is certainly the best plan, for even the most elaborate arrangement of flowers often has a very tired aspect before the entertainment is over. Some excellent authorities say that the apparent depression in cut flowers is caused by over-production in part, while the market has been still further injured by a fictitious sort of peachblow value set upon some flowers. In other words, it is as if our friend J—y G—ld had been watering roses as well as railroad stocks. But a visit to many large growers makes us wonder where the over-production comes in, for few of them are cutting large crops just at present, excepting bulbs. And many report an annoying partial failure of crops just at this season. Magna Charta is bringing about 50 cents—much too little for this season. Beauties are much preferred to them, only there are not too many in the market.

Mr. Rudolph Asmus rather doubts whether Grace Wilder is a carnation that pays. It is fragrant and prettily colored, but a great many of the flowers have a pinched appearance and are not salable in consequence. They look as if they had been kept for a long time—not a very desirable peculiarity.

We hear a good deal of admiring comment on the fine roses grown at Nyack by Messrs. Tucker and Depew. Their La France are described as perfect wonders. The secret of their success is said to lie largely in the soil, which is a sort peculiar to the district. It is tolerably light and friable, very dark in color, and looks like disintegrated volcanic rock, which indeed it may be, from the geological formation of the locality. A thorough chemical analysis will determine its difference from other soils used, and if the necessary constituents cannot be supplied by fertilizers we shall probably hear of a corner in Nyack soil; some one will want to buy up the entire district.

Mr. Ernest Asmus had a batch of exceptionally fine French lilac in for Christmas; the plants were simply a mass of



bloom—hardly a leaf visible. They were just plunged into a bench of sand, with a ball of moss, which would naturally be a mass of fibrous roots.

Now that roses are cut with such long stems it is found advisable to pinch off any short flower shoots around the main buds; this not only strengthens the flowers which mature, but produces a lot of good growth at the bottom. It saves strength, and a grower cannot afford to waste vitality in forcing.

EMILY LOUISE TAPLIN.

#### Notes from Philadelphia.

BY WM. FALCONER.

For extreme kindness my thanks are due to Edwin Lonsdale.

ROBERT CRAIG is one of the most genial and beloved florists in the city.

MR. HARRIS makes a specialty of chrysanthemums and has raised some fine varieties.

THE LARVE of the "rose-bugs" prey upon the roots of heliotrope as well as upon those of roses, and with fully as damaging results.

UNDER THE NAME of *rosea multiflora*, a very pretty pink bouvardia is much grown around Philadelphia. Indeed this variety together with Alfred Neuner and Davidson's are, so far as I saw, the sorts most generally grown there.

"I HAVE no retail trade whatever. I grow for the wholesale market only. But in summer there is a deal of driving along the road by my place, so I am going to make and plant some large canna and other beds where the people can see them. It will have a wholesome influence, and I know it will create a demand." So said a wide-awake florist.

ENGLISH IVY seems to do pretty well about Philadelphia. I saw it covering walls some fifteen or sixteen feet high. Protection from bright sunshine in summer or winter, also from winds in winter, is what it most needs.

ASPARAGUS TENUISSIMUS is grown in large quantity and very fine. It is planted out in beds and run up on strings in the same way as we do smilax. Mr. Craig has a lot planted alongside the pathway under the benches. This is not run up on strings, but cut in a short state. Mr. Burton has a lot of *A. plumosus* planted out in a bed with his *A. tenuissimus*, and likes it very much. But one cannot get up a stock of it very quick.

SADIE MARTINOT, yellow, is one of the best late chrysanthemums; *grandiflorum* is unsurpassed, and Cullingfordii, on account of its color, is indispensable. Among the new varieties of this year I observed one with prominently furcated petals. Flowers with stiff stems are more desirable than those with slender stems. Large flowers are in demand at good prices. It pays to disbud.

WHERE a too strong solution of fire-tree oil had been used as an insecticide in the case of some young dracenas, the plants suffered sadly.

ONE FLORIST TOLD me he is going to try 2,000 gladioluses. John Taylor grows them, and he can't see why he can't, too. He will plant them out on the benches in rows between his carnations, to succeed the carnations. *Brenchleyensis*, scarlet; Isaac Buchanan, yellow, and Shakespear, white, are the varieties he is going to plant.

CROTONS FOR BEDDING OUT.—In Fairmount park, also in the grounds at Girard

College, crotons were extensively and most satisfactorily used as bedding plants last summer. So well did they do that "everybody" is determined to have beds filled with crotons next summer. And the florists are governing themselves accordingly. For this work the narrow-leaved are better than the wide-leaved crotons.

OF LINUM TRICYNUM Mr. Harris has raised a very handsome stocky set of plants, which he has disposed of to the florists for their window and other decorations at Christmas. Its great profusion of bright yellow flowers has a telling effect.

LILIUM HARRISI.—Along the front in a bed beside a large greenhouse I noticed a dense row of green leaves. "What have you there, Mr. Craig?" "That is *Lilium Harrisi* from scales. I just sowed a row of them there and now they have made nice little bulbs. In the spring I will lift them and send them to Bermuda to be grown into flowering bulbs."

MOST of the recently built greenhouses are heated by steam. While many of the florists would not throw out a hot water apparatus to make room for steam, they prefer to use steam in their new houses.

EVANS' SYSTEM of ventilating is a good deal used and very much liked. In the newer houses the ventilators are made to open at the ridge pole after the fashion of the model greenhouse shown by John May at Philadelphia in August, '86.

MR. GEORGE W. CHILDS' place at Bryn Mawr is the handsomest private garden around Philadelphia. The estate contains some 137 acres.

THE MAGNIFICENT bronze vase presented to Mr. Childs a year ago by the Philadelphia Florists' Club stands immediately in front of the mansion house and in the most conspicuous site in the garden.

THE FINER EVERGREENS in the more exposed parts of the grounds are protected from the biting winds of winter by means of hurdles set with corstals, placed to the northwest side of the plants. In former winters when protectors were not used, the evergreens suffered considerably.

IN THE greenhouses large wire baskets filled with *Asparagus tenuissimus* are suspended from the roof. The fleecy vines hang down over the sides of the baskets in an elegant manner.

THE SPECIMEN palms, ferns, cycads and other fine-leaved plants with which the large conservatories now are filled are used for outdoor decoration in summer. The greenhouses then are filled with gloxinias, begonias, gesnerias and other summer-blooming plants, also caladiums for leaf effect.

BOTH at Lonsdale's and Craig's places in their new houses I observed some of the "indestructible benches"—that is, benches made of iron and slate, and both gentlemen regarded them with much favor. The original cost is little more than that of wood. They are certainly indestructible, always neat and clean, and afford no genial quarters for insect vermin or fungus parasite.

MR. LENTZ'S place being a town lot and rather centrally situated, his land for growing his winter-blooming plants on out of doors in summer is quite limited. But in order to make the best of it, he now has every bit of vacant land forked up roughly into ridges, thus to remain over winter under the ameliorating influence of frost and snow. This throwing

up of the land over winter is nearly as good for the crops as resting the land or changing the crops.

WILLIE CRAIG is doing something with rhubarb and mushrooms under the stages of his father's greenhouses. In these houses, where the benches are lifted well up from the floor, there is capital accommodation for mushroom growing. There is very little drip from the benches, but any condensed moisture or drip that might fall upon the surface can be arrested by placing a thin lining of fresh straw manure over the top of the bed. The mushrooms will come up as well under the straw manure as if it weren't there, only there is a little more bother in picking them. Good fresh spawn is the greatest secret in mushroom growing.

HANDSOME CACTUSES.—I never before saw *Epiphyllum truncatum* (Lobster cactus) better done than I found it at Craig's. It was grafted on *Cereus cylindricus* some four feet high. The *cereus* stem was stout, fleshy, vigorous, and the *epiphyllum* perfect spherical heads about eighteen inches in diameter and so plump and green as to plainly tell how well they were nourished by and loved the stock on which they were grafted. The *cereuses* had been bought at auction at Young & Elliott's for 25 cents apiece. Planted out in a greenhouse Mr. C. has known them to run up ten to fifteen feet in a year. This being so, wouldn't it pay to propagate them for use in grafting? Of course these, like most other cactuses, can be increased in quantity from seeds, if one could only get the seed. The *pereskia* stock so much used for *epiphyllums* is slender-stemmed and moderate in its supply of nourishment, but it is a capital rooter and very tough.

#### New York.

*Passiflora princeps* is in large demand, with hardly any supply.

Mr. Chas. Henderson is convalescing from his recent severe illness.

Thorley intends holding a floral show the middle of January; a magnificent display will be made.

Funeral wreaths are fastened with an immense bunch of long stem roses and a French loop knot of ribbon.

Financially the chrysanthemum exhibition was a failure; stormy weather interfered with the attendance.

Mr. Robert E. Grimshaw has returned to Alex. McConnell's, where he was a valuable assistant for four years.

Robert Buchanan has been exhibiting a fourcroya with a stalk thirty-three inches in height and fully budded.

Pillows for funeral designs are made up of clusters of all colors of roses, of violets and spring flowers, and are very gorgeous.

The contemplated partnership of Mr. Thorpe with the firm of Siebrecht & Wadley has not been, and we are informed will not be, consummated.

Such novelties as Christmas roses, poppies and snowdrops are much sought for by some flower buyers, and what are to be had bring very high prices.

Thorley introduces the casket plaque which is the full width of the casket, is composed of *Eucharis amazonica*, and is festooned with zygopetalums.

Orange trees from fifteen to eighteen inches high, and on which are from ten to fifteen oranges, are sold for \$5 retail. A grower imports these, keeps them two years under cultivation, and is now reaping a harvest. They are massed together in decoration.



FANCY BEDDING; LINCOLN PARK, CHICAGO

The sale of foliage plants for home decoration has never been so large in New York as this season. A table fernery and a window of tropical plants seem to be part of every household.

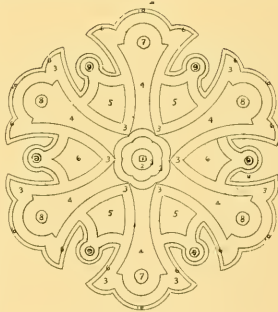
Bamboo easels are made up entirely covered with ferns and with a fern cushion resting on them. On this cushion is placed a wreath made up as above, or the design presented by some near friend. This easel is always placed at the head of the casket. At present this is the most fashionable funeral design.

The New York Flower Mission intends extending its work by this winter placing plants, widow boxes and growing baskets in the homes of the poor. The Five Points and Bottle alley, which are the most notorious haunts of vice, will get their share. It has been proven that plant cultivation works more reform than tracts; hopeless drunkards having been interested in this way and turned over to right living. It is proposed by the ladies of the mission to hold a flower show in the spring, when prizes will be offered for the best grown plants. Printed instructions of how to treat the plants will be left with them.

#### Chicago Parks.

The handsome mosaic bed illustrated herewith was the past summer to be seen in Lincoln Park. It was sixty feet in diameter and the beautifully contrasted colors of the plants it contained made it a very attractive ornament to the park. The greenhouses and conservatory of the park are shown in the background. The

circular piece of lawn on which the bed was laid was edged with a two foot wide border of sweet alyssum.



KEY TO DIAGRAM.

1. Vase filled with plants. 2. Coleus Bacon. 3. Achyranthes Lindenii. 4. Coleus tessellata. 5. Coleus Pine Apple Beauty. 6. Geranium Mt. of Snow. 7. Geranium Wonderful. 8. Geranium Mad. Thibaut. 9. Yucca. 10. Thymus argentea.

#### Cincinnati.

Critchell tried to corner the market on Christmas trees, and rented another store at Fourth and Elm streets. Reasonable prices prevailed.

Mistletoe brought rather fancy prices. There was enough on hand to satisfy the demand.

A handsome Christmas design made by Critchell was a great star of holly, the points of crimson immortelles.

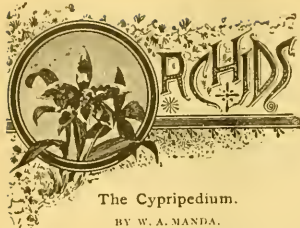
One of the handsomest bits of outside work ever seen in Cincinnati was done by Gardner in the decoration of a South street building. The entire front was draped with evergreen, and holiday greetings were traced across the front in letters of cedar.

The rush for funeral work still continues. Huntsman made a design for a dead telegrapher—a large affair—two floral telegraph poles with the connecting lines down. He also made two very pretty designs to cover fonts; one was a star of white roses above which was raised a crown of red roses and a tiny white cross, the other a handsome crown in relief from the center of which rose a cluster of delicate ferns.

Churches of all denominations did a good deal of decorating Christmas, and among those of the Episcopal faith there was a spirit of generous rivalry that made the hearts of the flower men gay. Blossoms were used as well as green. Holly was never more plentiful, and some small dealers held it at ruinous prices. For instance, wreaths were sold for a quarter! A year ago they brought two and three times that sum. Evergreen trimming, which was offered at 10 cents a yard, suffered a "cut" of 2 and 3 cents just before the holidays.

REN MULFORD, JR.





### The Cypripedium.

BY W. A. MANDA.

VIII.

For florists' use these are indispensable; they would pay well if grown for cut flowers alone, not considering that as the plants increase in size the value of the stock is doubled, and thus any variety may be profitable. But when grown for strictly commercial purposes, only such varieties should be selected as are of easy growth and free flowering; such could be procured in quantities at a moderate outlay—of course the majority to be winter-flowering kinds.

Among the best for that purpose is the old *C. insigne*, still holding its place against all the newcomers, and if the varieties *Maulei* and *Chantini* could be had as plentiful as the old form, then a florist could not have too many of them. The flowering season extends from November to April. *C. Harrisianum* is a splendid hybrid, producing two or even three crops of showy flowers at different times of the year, but the normal season is from November to February. *C. Spicerianum* has made quite a revolution among cypripeds, and is a kind that is eagerly sought for. It flowers from November to March. *C. villosum* is very good to cut in February and March; at the same time *C. Boxalli* produces its bold flowers. *C. Ashbourniae* is a very floriferous hybrid, blooming several times through the year, but is at its best in the autumn; *C. Lawrenceanum*, with its large flowers from May to August, is also good. The chaste *C. niveum* cannot be too highly praised; it flowers generally from June to September. *C. barbatum* and its varieties flower through the whole summer; *C. argus* comes in handy from February to May, while the old-fashioned *C. venustum* flowers from November to April.

The *selenipedium* section is also fine for this purpose, especially for home trade where single flowers could be used as they open, for it would not be advisable to cut off the whole spike at once, except in the case of *S. Dominianum*, which may be considered the best of that section, producing three or four flowers, all open at the same time. *S. Sedeni* is another fine hybrid and will continue in flower from September to June. *S. longifolium* has the same flowering period, while *S. Roelzii* will flower from December until September. Those above mentioned are by no means all the cypripeds good for florists' use; in fact, many more could be enumerated, but those recommended are the only ones that are in any way plentiful. We may add many more kinds as they become more common.

#### PLANTS IN FLOWER.

*Cypripedium Spicerianum*. Reich. f. Asam.—Roots rather thin, downy and light-colored; leaves rather thin, dark green, pointed, eight to twelve inches long by one or one and a half wide, and slightly marked with netting like tessellations; both sides are perfectly smooth and somewhat shining; scape rather thin, smooth,

purplish, six to twelve inches long; bract one inch long, green; ovary one and one-quarter inches long, rather thick; dorsal sepal one and one-half inches long by one and three-quarters inches broad, revolute at the top, the lower part is light green, while the main portion is pure white, the whole being traversed by a purple band in the middle; lower sepal barely an inch long, greenish; petals undulated, green with a narrow purple

running in straight lines into the white border, where they are deep violet; lower sepal light green, white toward the tip, with several lines of large spots; petals two and one-half inches long by three-quarters wide, tawny yellow with darker lines; lip two inches long and one and one-eighth of an inch broad at the opening, rather narrow at the end, of a beautiful bronzy yellow color; staminode as in type. This is by all means



line in the middle, one and one-half inches long and three-eighths wide; lip one and one-half inches wide and nearly one inch broad at the widest, roundish, tawny yellow and spotted in the inside; staminode broadly reniform, undulated, white with violet center. This is an introduction of recent years, only having been discovered in 1879. It is said to grow upon steep rocks along the bank of a river, and although imported in large quantities, it is by no means too plentiful as yet. The beautiful and odd flowers are produced with great freedom. The finest specimen in this country, I believe, is that grown by Mr. F. L. Harris of Wellesley, of which the photograph will give the reader a good idea. This beautiful species requires a warm house temperature and should be potted in turfy peat and sphagnum moss; the plant should be elevated above the rim of the pot and should have perfect drainage. There are many beautiful varieties of this plant.

*Cypripedium insigne*. Wall. Var. *Chantini*, Hort. Nepal.—Roots, scape, bract and ovary as in type; leaves much broader—nearly one and one-half inches broad; dorsal sepal two and three-quarters inches long by two wide; slightly revolute, yellowish green, the upper half pure white, extending downwards along the borders, the large and dark spots

the grandest of all the varieties of *C. insigne*. The broad, white and beautifully spotted sepal in regular lines is the chief distinction of this variety, which should be in every collection. The culture does not differ from that of the type.

Botanic Gardens, Cambridge, Mass.

#### Two Winter-Blooming Lælias.

*Lælia anceps* and *albida* have several times been named as suitable varieties for the production of cut bloom, and the accompanying figures will therefore be of interest. Both these varieties bloom in December and January, when choice cut flowers are in good demand, which of course enhances their value for the purpose. The following descriptions are taken from the Dictionary of Gardening:

*Lælia anceps*. Flowers fragrant, two to four inches across; sepals and petals rose-lilac; lip deep purple, shaded with lilac; scape three to six flowered; leaves solitary or in pairs, broadly lanceolate, brightshining green; pseudo-bulbs ovate, somewhat four-angled, from four to six inches long. Introduced from Mexico about 1834.

*Lælia albida*. Flowers very fragrant, one and one-half to two inches across; sepals and petals mealy-white; lip white or pale pink, streaked in the center with lines of yellow; scape slender, from the



LELIA ALBIDA.



LELIA ANCEPS

top of the pseudo-bulb, from one foot to two feet long, and three to six-flowered; leaves ligulate, coriaceous, dark green, usually in twos; pseudo-bulbs roundish, clustered. Introduced from Guatemala in 1838.

#### Among the New Jersey Orchids.

The party of horticulturists who visited Mr. Jas. R. Pitcher's orchid houses at Short Hills on Dec. 17 express so much enthusiasm over the display there, that a slight outline of the attractions may be of interest.

Mr. Pitcher has wisely begun his collection by confining himself chiefly to one family—the cypripediums; he is said by good authorities to have the most complete collection of this family in the country. Of course the houses contain charming specimens of other tribes, notably some fine phalaenopsis, but cypripediums take the lead. The list of the collection contains some 188 varieties and species, many scarce and unique. Mr. Pitcher is an enthusiastic hybridizer, and many of the plants are now maturing seed from his crosses; he is assisted in this by his gardener, Mr. Richard Brett, whose name is familiar as a prizetaker at the Orange shows. Mr. Thorpe has also been engaged in cross-fertilizing in this collection.

The large plants of *Cypripedium* insigne now in bloom are remarkable for their warm yellow tinge, quite distinct from the usual green cast. They are grown in an exceedingly light house, which may have something to do with it.

*C. Spicerianum aureum* was worthy of much praise; the upper half of the petals is a warm golden yellow, the lower half green, as in the ordinary specimen. *C. insigne punctatum violaceum* was a very strong variety; so was *C. Harrisianum*.

A newly opened flower in a batch of *C. Lawrenceanum* excited a lot of eager interest in the orchid fanciers inspecting it.

It is very distinct in flower from *Lawrenceanum*, though the foliage is alike; the petals are covered with long hair and devoid of the usual spots. It was pronounced a natural hybrid between *Lawrenceanum* and *Hookeræ*, which are found in the same locality. *C. Sallierii* hyeanum is an awkward name to get off in a hurry, but it would charm the heart of an orchid fancier as seen in this collection. *C. Argus Moensii* is another beautiful thing. *C. cardinale*, a very striking hybrid, is the result of a cross between *Sedenii* and *Schlimii album*; it has a superb rich crimson lip and blush white petals.

One of the rarities of the collection is a little plant of *C. Faireanum*, a summer-blooming sort from the mountains of Assam. It grows on limestone rocks at home and attains its best growth in the same temperature as cattleyas.

Mr. Pitcher intends to devote his attention next to collecting *oncidiums*. He has now in bloom a fine specimen of *Oncidium phalaenopsis*—the loveliest member of the tribe. A plant of *O. divaricatum* showed three large spikes of strong flowers. A number of plants of *Phalaenopsis Schilleriana*, just coming into bloom, were a strong variety, showing marked variations in the type. There will be a succession of notable flowers here all through the winter months, in addition to the many *cypripediums* blooming through the spring and early summer.

In the general collection there is quite a number of good *nepenthes*, an exceedingly pretty plant of *N. Veitchii*, and a lot of American seedlings of the same strain as those at Rose Hill nurseries. Among foliage plants *Alocasia Sanderiana* was a novelty, with big, jagged leaves, and there were nice *crotons*. A lot of azaleas and camellias are from the Wilder collection, among the latter being that venerable seedling, Mrs. Abbie Wilder, which has seen some fifty birthdays.

There is also a complete collection of *gleichenias*—the best of all ferns for exhibition.

Among the guests whom Mr. Pitcher entertained on the 17th was Prof. O. C. Marsh, of geological fame, who is himself an enthusiastic orchid collector. He made a witty speech after the luncheon, in which he alluded to the remarkably fine *Pitchers* grown in Orange air, addressing their worthy host and the pitcher of the Yale base-ball nine as examples. Mr. Wm. Elliott returned thanks for the New York guests, and there were appropriate remarks from Mr. T. H. Spaulding, Mr. May, Mr. Thorpe and others. It was an occasion of much mutual good feeling.

Mr. De Forrest of Summit is another orchid grower of that section; he has a commercial collection numbering some 15,000 plants. They are being grown solely for cut flowers. There is a perfect wilderness of *Cattleya trianae* now blooming and coming into bloom. It is especially interesting to notice such a quantity of plants coming into flower—they show such marked variations of type. Here is one of Mr. De Forrest's *trianæ* just opening with a flower as nearly white as may be, the only color a yellow lip. Other adjacent plants vary from pale mauve to rich purple. The darker flowers sell best, we are told. *Phalaenopsis*, *lælias*, *lycastes*, *oncidiums*, *masdevallias*—all are simply for the cut flower trade. Skillfully grown in such quantities, they may be expected to control the market. It is a decidedly new departure, this growing of orchid flowers in as great quantities as roses.

Mr. De Forrest is discussing the feasibility of setting an ice machine to work during the summer similar to those used in breweries, to keep *oncidiums* and *masdevallias* cool. It is always a vexatious question, how to keep these plants cool enough during hot days. They are better outdoors than in, when it is practicable.



One of the prettiest features of Mr. De Forrest's place is a glass-roofed corridor-like space connecting ranges of green-houses. It is tastefully grouped with foliage and flowering plants; here and there a palm, and here and there an orchid, until the effect is "just lovely," to use a school-girl phrase. There are occasional alcoves containing seats, and light and color everywhere; it would give a much-needed hint to many private places.

Apparently little Jersey is going to take the same rank in orchids as in roses; its horticultural record is likely to be an enviable one.

EMILY LOUISE TAPLIN.



Papa Gontier is doing well. In many cases it has supplanted Bon Silene. American Beauty is extensively grown. In Europe they may rant and rave about its proper name and origin, but we won't. Its self and name are here to stay.

Madame Cusin was not very popular last year, but it is in demand this season. Madame Gabriel Luizet is a great favorite and much grown, but in the meantime as dormant as a Jacqueminot.

Fresh cow manure as a top dressing to roses on benches is not used as much as in Jersey. Here the manure from the stockyards, and which is said to contain a good deal of sheep manure, is used.

Mr. Lonsdale's new greenhouses, built expressly for roses on benches, are wide, span-roofed structures, 250 feet long. The inside arrangement is similar to what we usually find in hip-roofed rose houses, but the part next the wall at the north side is used as a smilax bed, the smilax being planted in a bed on the ground.

Puritan rose has its friends and foes. But the general opinion seems to be that it will come better after New Year's. At this time of year we often find it badly affected with mildew and spot, and its blossoms opening imperfectly. The fragrance is delicious. We don't yet know how best to treat it; possibly we will have to grow it in a house by itself.

Can't grow Cooks as we used to. While many roses do well the first year and fail the next season, Niphetos will live and thrive and bear capital flowers for many years if worked on La Marque. We cannot do without Perle, but sometimes its flowers come small. Sunset is indispensable. It is a good rose and dealers want it, and they often like to get the Perles and Sunsets mixed together. Bennett is a good cropper and keeps healthy. We can't get along without Mermet. Bride is a capital white rose; wish its flowers had a stiffer stem.

W. F.

#### The Marechal Niel.

Will some one describe, through the FLORIST, the proper way to prepare a border for a Marechal Niel rose, to be planted in a greenhouse for winter forcing? What part of the house to plant it (span-roof house, 11 x 40 running north and south) and any information that will

be necessary to successful culture—such as watering, using fertilizer, trimming, and general treatment throughout the year.

F. T.

#### Budding the Niel and Potting Cuttings.

1. We have a Marechal Niel rose planted out in one of the greenhouses, but as it is not very prolific in blooming, I thought of budding another variety—a better bloomer—on it. Kindly mention a few varieties in the FLORIST—placing them in the order of their merit—that would be suitable. I want a climbing rose, a good bloomer, and the bloom to be in fair form.

2. What temperature is best for rose cuttings just potted off from the bench, and what is best—to pot the cuttings when they are just calloused, or to leave them till they have formed roots?

FLORIST.

ANSWERS by a Long Island grower: 1. I would recommend Mdle. Eugene Verdier, a tea rose, which although not new, is not near as well known and appreciated as it should be for the above purpose. It is doubtful whether an old M. Niel worked over will ever be equal to a fine, young, healthy plant,



THE LANGTRY PRIZE

and it would be better to plant one at the same time the old plant is budded. The old plant could be cut away gradually. Other varieties suitable for the purpose are Niphetos, Wm. Allen Richardson, Celine Forester and Gloire de Dijon.

2. The temperature for rose cuttings just potted should be from 55° to 60° at night, with 70° to 75° in the daytime, keeping them rather close for a few days and gradually inuring them to more ventilation as they become established. A cutting should have roots from half an inch to one inch long when potted, being careful not to injure the young tender roots in the operation. A cutting that is merely calloused, but has no roots formed, is not fit to pot; in fact, this may be said to be the most critical state of its existence.

#### The Langtry Prize.

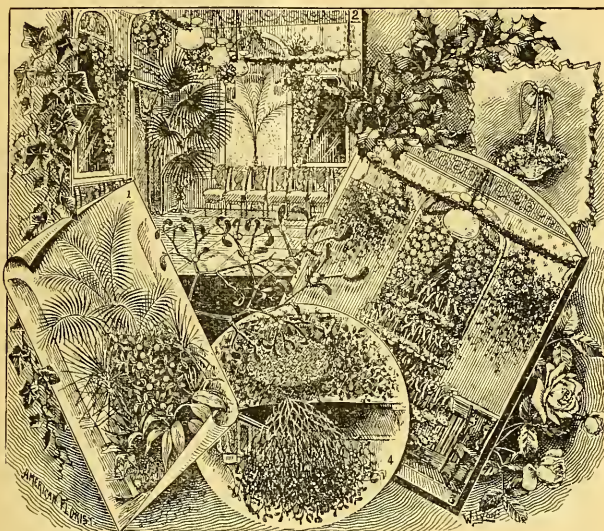
This is a silver tiddly set; there are five pieces of satin finished solid silver, lined with gold, the edges fluted and with a slender line of engraving; the handles being delicate scrolls. The spoons are prettily engraved with flowers. This will be presented to Mr. John Finn the first of the year.

#### Odds and Ends.

At the last meeting of our Florist Club Mr. James Pentland delivered an excellent address on "Watering". He treated the subject in a masterly way, his remarks throughout being of that clear and sensible nature so characteristic of "Uncle Jim." Among other things Mr. Pentland said that he "considered a man a pretty good gardener who thoroughly understood how to water plants." This may appear a little extravagant at first, but it is simply a fact; no matter what else a man may know, no matter how thoroughly he may have digested all other details of plant culture, if he has not properly mastered the art of watering, he cannot be a successful cultivator. Airing is another important operation that is sometimes performed in the most injudicious manner. I recall the case of a florist whom I once heard read a very able paper on "Mildew"; so completely did he exhaust every detail that it was quite evident there was nothing worth knowing about mildew that he did not understand. Visiting his place soon after, I was more than astonished to find his roses almost annihilated with mildew. It was between nine and ten o'clock on a warm—almost hot—September morning as we entered the first rose house; the atmosphere was actually "smothering," and my friend, remarking that "a little air wouldn't hurt," proceeded to give a "little" air by throwing every ventilator open to its full capacity. The same thing was repeated in the other houses as we passed through, and while the air so admitted had a decidedly cooling effect on the temperature of the houses, the example thus afforded of my friend's methods satisfied me that he was not altogether infallible on the subject of mildew, and that he certainly did not know how to air his houses.

Some growers about Baltimore do not believe in the usual method of planting out violets during the summer. They root their cuttings as early in the fall as possible; these are potted or worked off into shallow boxes and wintered over in a cool house. As soon as the crop is over in the spring the violet frames are emptied out and a new bed made up of first-rate compost, in which the fall struck violets are planted, and are not moved again until turned out the following spring. The plants receive careful attention during the summer, forming fine clumps by fall. The system may have its objectionable features, but I have satisfied myself that where large, early flowers are desired, the method is a good one.

I once heard a college professor say, in his remarks before one of the college societies, that the literature a man read was "a pretty safe index to his character." I take it, therefore, that the man who evinces any contempt for good literature, especially such as has a bearing on his own occupation, does not possess a truly enviable disposition. One morning, not long ago, I "dropped in" to exchange civilities with one of my neighbors. Our conversation turned on the merits of roses on their own roots as compared with budded stock, and I happened to refer to an article on the subject in a previous issue of the FLORIST. My companion said he had not seen the article, and in answer to my query as to whether he took the FLORIST, he said he did, "and most every other gardening paper published in the country," but, he added, "I never read them." He straightway proceeded to condemn horticultural



BALL DECORATIONS.

literature generally, particularly as a source of instruction for "men of great practical experience." His remarks were not characterized by any very flattering allusions to those who add the mite of their experience to this same literature—rather otherwise—and I devoutly trust that my nervous system may never again receive so severe a shock. However, I learned all he designed to teach me, for despite his modest allusions to himself, I knew that I was expected to consider myself favored by the eloquence (?) and patronage of a florist who had nothing more to learn. I fear I did not comport myself with becoming reverence, and that the look of ineffable pity which I bestowed on him at parting was quite thrown away on this marvelous man, for, looking in on him a week or so later, I found him wrapping up plants for shipment in the leaves torn from last issue of the *FLORIST*. It is gratifying to know that cases of this kind are very, very exceptional, for whenever a florist attains to such a dizzy height in his own estimation that the acquirement of further knowledge is impossible, he has lost the qualities necessary to make him a useful member of his profession. The late Robt. Buist once said to the writer: "I would lose every particle of interest in horticulture if I knew there was nothing more for me to learn." And this sentiment will be echoed by every genuine florist.

Mr. Wm. Halliday has about 150 feet of the center bed in one of his houses filled with *L. Harrisii*, the space between the lilies being occupied with young roses. This method of growing *Harrisii* is in vogue with two or three Baltimore growers, and is well adapted for the production of large bulbs. The system may have other desirable features, but it has at least one drawback—the impossibility of regulating the period of bloom.

A fashionable wedding which took place last week at York, Pa., about fifty miles from Baltimore, was a most mag-

nificent affair as to the floral decorations, which were furnished by R. J. Halliday of this city. The chancel of the church was a perfect forest of sub-tropical plants. At the top of the chancel window there was a large monogram composed of Henderson and Sunrise carnations; the pillars and chandeliers were completely enveloped in smilax, the ceremony being performed under an immense *Seaforthia* elegans fifteen feet high. The stem was entwined with a cable of *La France* and *Niphetos* roses, and the branches draped with smilax and *La France* buds. The bride's bouquet was entirely of orchids; four bridesmaids carried *La France*, and four Puritan roses—fifty buds in each bouquet. The decorations at the house were most elaborate; the grand stairway was a mass of smilax, pink and white roses, violets and lily of the valley; the doors of the parlors and drawing-room and the folding doors of the reception room were completely covered on both sides with fern fronds and the panels outlined with roses. Against a large mirror in the reception room a half urn was placed; the urn was of white carnations and was filled with mixed roses. The interior of the canopy under which the bride received was formed of white camellias and *Eucharis amazonica*, the outer portion being chiefly smilax. A noticeable design was a picture resting on a large easel; the frame was of smilax and Roman hyacinths; the groundwork of the picture was of white carnations, on which rested six magnificent American Beauties. The decorations throughout—a detailed account of which would occupy a couple of columns—were exceedingly creditable to Baltimore. It was a profitable job withal, and Halliday's face is wreathed in smiles ever since.

I am not the only one in Baltimore who is disappointed in the Puritan. While calling on Mr. Wm. Fraser the other day I was favored with that gentleman's opinion also. Mr. Fraser is thoroughly imbued

with the trait for which his countrymen are proverbial, and thinks twice before he speaks once. His opinion, founded on experience, was therefore given with much caution, but it was decidedly unfavorable to the Puritan. This variety and *Her Majesty* are about the only two roses with which I have failed to attain some measure of success, although with both I have succeeded in keeping up an unlimited supply of mildew. However, I am by no means done "trying" with Puritan. I have seen good blooms of it, and I am always inclined to think that what one man can do is quite within the range of possibility for another to accomplish.

*Deutsche Perle* is an azalea which should be in every collection. The flower is double, pure white and of fine form. It is one of the earliest double flowering varieties of which I have any knowledge, as it may be had in bloom in November if necessary. A. W. M. Baltimore, Md.

#### Ball Decorations.

The accompanying sketches show portions of the decorations arranged by Klunder at Delmonico's, New York, for the Livingston ball. No. 1 shows a group of plants in the corridor at the entrance to the ball-room; this contained orange trees, yuccas and small palms with adiantums at the base. No. 2, a corner of the grand salon; in the corner was a large *latania*, and in front of the window a *Cocos Weddelliana*. No. 3, the center of the ball-room, opposite the main entrance; the mirror had a double curtain of roses—one side pink and the other white; other mirrors had half curtains, alternating pink and white. The favors were Marie Antoinette baskets filled with roses; the stand of favors standing in front of the large mirror as shown in sketch. No. 4 shows the center of the musicians' balcony, which was draped with holly and ivy, with an oval plaque of tulips in the center. A bough of mistletoe was suspended from it.

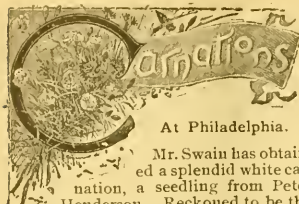
#### Obituary.

CHARLES H. MAROT died Dec. 21 at his home in Philadelphia, aged 62 years. Mr. Marot was well-known to horticulturists as the publisher of the *Gardeners' Monthly*, of which journal he has been the proprietor for some twenty-five years. He was born in Philadelphia.

WHAT IS AN AMATEUR?—In reply to this query the *Journal of Horticulture* says: "A categorical reply cannot be given to this question. The framers of the schedules of very large shows regard all persons who are not nurserymen as amateurs; but this distinction cannot apply to local shows, in which it is desirable to draw the line between professional gardeners and persons who do not employ them, or only very occasionally to carry out work that is ordered to be done. In such cases an amateur might perhaps be defined as 'one who does not make his living by gardening, and does not employ a gardener regularly.' This slight altering of your suggestion may possibly meet the case of others who may be in a similar position to yourself."

MANHATTAN, KAN., DEC. 22.—Bassler & Bro.'s store and greenhouses, with contents, have been totally destroyed by fire. Loss about \$3,000; insurance light.





At Philadelphia.

Mr. Swain has obtained a splendid white carnation, a seedling from Peter Henderson. Reckoned to be the best white in the market.

Robert Craig is eulogistic over E. G. Hill carnation. Mr. Burton doesn't like the occasional light streaks seen in the flowers. My own opinion is that it is the finest scarlet carnation in the market.

Edwin Lonsdale is now and has been for some years industriously at work cross-fertilizing carnations and raising new varieties. He has got some pretty good roots, especially a delicate pink-flowered one that Craig will send out. It is a vigorous grower.

W. S. Allen of New York says that if the Philadelphia growers would cut their carnations with long, leafy stems and do them up in handsome bunches of fifty, they would realize a much higher price than they now get for loose flowers.

Leutz had some nicely flowered Peter Henderson carnations in pots, also Buttercup. But Buttercup isn't quite satisfactory around Philadelphia, and Grace Wilder is often flimsy and refractory.

I am inclined to think that Crimson King is past its usefulness. Here, as at home with myself, it isn't what it ought to be. True, it gets good after New Year's. Other old varieties are failing. The general impression would indicate that carnations don't last long, and that we must keep at work raising new varieties if we will have vigorous stock and good flowers. W. F.

**CARNATION BEAUTY OF OXFORD.**—This has been in cultivation by S. W. Passmore & Son, Oxford, Pa., for about three years. It is a deep crimson, full, well fringed and very free bloomer. B.

#### The Proper Atmosphere for Plant Houses.

A neighbor of mine drew me into a friendly discussion the other day as to what might be considered, generally speaking, a good temperature for plant houses. He expressed himself as favoring a temperature of 50°. Our opinions, however, seemed widely different, and I don't think either one of us became converted to the other's opinion. There is a peculiar atmosphere, a happy combination of heat and moisture, in which all plants appear to delight. In its production practical judgment is an important factor, as no infallible rule specifying the precise temperature and necessary amount of moisture can be given. There must be sufficient moisture to balance the heat generated in the house, but not enough to cause that chilly, damp atmosphere so unfavorable to plant life.

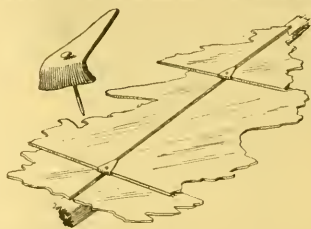
For my own part, I very rarely look at a thermometer, being guided entirely in my operations by the "feel" of my houses as I walk through them. Yet I could not well describe the atmosphere to which I refer, and its production is one of those things the true "inwardness" of which can only be got at by practice. Of one thing I am convinced—that many florists do not supply enough moisture in their houses during the night. The pipes or flues are sometimes furnished

with evaporating pans, but in many cases even these are wanting. I use evaporating pans in my houses, but in addition I see to it that the floors, etc., are well wet when the fires are banked up for the night. When the weather demands late and hard firing the floors are sprinkled oftener, and to this practice I attribute many a success in plant growing.

A. W. M.

#### Glazing.

The accompanying sketch illustrates a method of glazing practiced by W. A. Hammond, a florist of Richmond, Va. The rafters are plain bars  $2\frac{1}{2} \times 2$  inches without rabbets, the glass being held in place by small triangular pieces of sheet lead, one edge of which is bent over to hold the glass from slipping. A  $\frac{3}{4}$ -inch brass nail is driven (by a nail set with a hollow in the end, so it cannot slip) through the center of the lead, which



holds the glass secure. The rafters are placed sixteen and one-eighth inches from center to center—the glass being  $12 \times 16$ —which leaves a crack of  $\frac{1}{8}$ -inch on the bar, to be filled up with the white lead and putty mixture. This makes a very tight and light roof. Mr. H. states that broken lights can be very easily replaced, and that all outside painting necessary is two inches of the ridge pole and the ventilators; also that the method saves one-half in labor and putty over the usual way. The sheet lead used is what tanners call "3-pound lead"—that is, there are three pounds to the square foot. Zinc will not answer, as it is too stiff.

#### Plant Notes by Wm. Falconer, Long Island, N. Y.

**CARNATION E. G. HILL** is a splendid variety. Flowers scarlet, very large, and the calyx doesn't burst.

**SHRUBBY POLYGALAS AND CESTRUMS** are in bloom, but nobody wants the flowers.

**COMMON IVY**, although a hardy plant, will live and thrive year after year in a shady greenhouse.

**ASPARAGUS PLUMOSUS NANUS** is a great favorite as a house plant with the ladies. And it lasts well.

**CHINESE PRIMROSES** make the best of window plants in winter, and they last a long time in bloom.

**DRACAENA FRAGRANS** and **RHAPIS FLABELLIFORMIS** will flourish in the shadiest part of the greenhouse—even under the shade of other large plants and palms.

**PELARGONIUMS**.—Don't let them run away, but keep them well pinched in, so as to have them stocky. Water moderately, but keep them dry overhead. Plants raised from cuttings put in now should bloom in next May or June.

**SOME BILLBERGIAS** are coming into bloom, and some of them are extremely brilliant. But it takes a Freuchman to get into ecstasies over them.

**LAPAGERIAS** will soon begin to throw up young shoots. Slugs and snails are as fond of these tender tips as they are of lettuce leaves; so look out for them.

**HETEROCENTRUM MEXICANUM**.—Both the white and rose-colored forms are now in full bloom, and they are extremely copious plants and decorative in the greenhouse. Of no use for cut flowers.

**EPIPHYLLUMS** are nearly done blooming. They will bear another but lighter crop of flowers towards spring. Don't over-water them at the root or wet them overhead, else the roots will be apt to rot and pieces of the branches drop off.

**CALECOLARIAS**.—Keep them cool, near the glass, but shaded from bright sunshine; re-pot before the plants become pot-bound, and never let them get dry. Use lots of tobacco stems in the house or fumigate frequently, as green fly is the persistent enemy of calecolarias.

**WINDOW PLANTS**.—If you wish to make a lady happy, give her a Cocos Weddelliana, a dwarf Plumosa asparagus, a Farleyense fern and a couple of Terminalis dracenas for her window.

IF **DALECHAMPIA ROEZLIANA ROSEA** naturalizes itself under the stages and along the pathways in our greenhouses in company with ferns, Impatiens sultani, aphelandras and the like, well and good; but don't be bothered with it as a pot plant; it isn't worth the trouble.

**ALOE**.—Don't keep species of aloe as dry in winter as you do agaves and most other succulents. The species of aloe should now be in active growth, and most of them should bloom between Christmas and April. Aloe albo-cincta is a very showy flowering plant and one of the best of the genus.

**SUTTON'S DOUBLE-FLOWERED SCARLET CHINESE PRIMROSE**.—From a 5-shilling packet of seed I have eleven plants, and every one is double and every one is "scarlet." The doubling is not nearly so full as represented in their colored illustration, but full enough to hold the blossoms.

**VENUS FLY-TRAP**.—I saw lots of it at Peter Henderson's the other day. What a quantity of this diomea has been introduced to cultivation, and how seldom we meet with a decently grown specimen or pan of it. It is found in "sandy bogs in the pine barrens of North Carolina and the adjacent parts of South Carolina," but is collected mostly in the neighborhood of Wilmington.

**BRAHMA FILAMENTOSA**.—One of the finest specimens I have seen was some years ago with Mr. Smith at Washington. As a rule young plants are pretty enough, but after they get up a few feet they seem to go back. One of my neighbor florists has thousands of little plants from seed.

**BRUNFELSIA**.—Some of these little Brazilian shrubs are now in bloom in our warm greenhouses. The flowers are moderately large, showy and very fragrant. When they open they are blue or violet, but change in a day to white or whitish, so that when in bloom the plants are thickly studded with flowers, some of which are blue and others white. This gives a striking appearance to the plants.

**TONICOPHILA SPECTABILIS**.—A shrub from South Africa. Our plants bloomed beautifully during November. The flowers are white, tubular (individually not



LILIAM AURATUM WITH FORTY-FIVE FLOWERS.

unlike those of bouvardias or ixoras), very fragrant, and arranged in crowded corymbs at the axils of the leaves. The plant is easy to grow, a sure and most copious bloomer, and flowers when quite young—not more than a foot high. I give it rose house or stove temperature in winter, and plunge it out of doors in a slightly shaded place in summer.

**PLUMBAGO ROSEA.**—A very free flowering East Indian plant, a favorite in old gardens. A slender shrubby vine. Usually begins to bloom in November. Of little or no use for cutting, but quite showy as a greenhouse plant. Plumbago zeylanica has white flowers, but otherwise resembles *P. rosea*. Plumbago capensis has blue blossoms; it is from the Cape of Good Hope, and is a shrubby and continuous flowering plant, that delights in the sunshine out of doors in summer and in the greenhouse in winter.

**SERICOGRAPHIS GHEISBRECHTIANA.**—What an easy to grow and pretty plant this is! We begin to cut it about December first. We raise it from cuttings in spring, plant these out in summer, lift and pot them in September, bring them indoors in October and give them a place on a back shelf or front shelf under the bench. I don't know of any "flowering" plant that will grow under a bench better than this will. In cutting we cut the plant clean over as we would a stevia, and lay a few of the stumps aside for cuttings.

**DAPHNE ODORA.**—What a sweet and favorite plant this is, and so easily grown! We can grow it well as a pot plant, but in order to have it in its most perfect state, plant it out in a cool, light, airy greenhouse, as a camellia or carnation house. It blooms in November to January. Plants only a few inches high will bloom. The late Wm. Bennett of Flatbush, N. Y., used to grow it splendidly and extensively planted out in his camellia house, and where they made large shrubs. We have no better house plant. It will grow and bloom in a sunless window as well as in a sunny one.

**NEPHROLEPIS DAVALLIOIDES FURCANS.**—Given plenty head room and grown in a warm shady greenhouse, no fern makes a finer specimen than does this one. And if growing in open, spongy material, well drained, and not over-potted and well supplied with water, it is one of the finest of all plants for decorating halls or apartments in dwelling houses. I have used the same plants all summer long for this work with excellent results. And even in winter, with gaslight and furnace or steam heat to contend with, its staying properties are uncommonly good.

**BERBERIS THUNBERGII** is a Japanese shrub of the first importance. Very hardy; the earliest of all to start into growth and bloom in spring, and it keeps

its foliage in the fall later than do the other deciduous species. Its habit is compact and bushy, size under four feet, foliage small but bright and pretty and very abundant, and it assumes a beautiful autumn tint. But its most striking beauty is its bright scarlet fruit, which it produces in the greatest abundance in autumn. And this fruit hangs onto the bushes most all winter, only very severe frost shrivels it a little. Now I've been thinking, wouldn't this Thunberg's Barbary when laden with scarlet berries be a capital plant for use in Christmas decorations? Instead of cutting it, we could grow the plants in pots and use them in that way, when, like any other pot plant, we could use the same plants several times. It is easily propagated, and the smallest plants fruit abundantly.

#### Lilium Auratum.

Our illustration shows a spike of *Lilium auratum* with forty-five flowers and four buds. It was grown by Mr. O. C. Pope of San Francisco, who kindly sent us the photograph from which the engraving is made. Mr. Pope says that the stem was a double one, growing over six feet in height, and the flowers covered a space two feet in length by one foot in diameter. It was grown in the open ground, with no extra care, only shading the ground from the direct rays of the sun—having a southern exposure, but not sheltered from the wind.

#### Watering.

It is a bad plan to be governed too rigidly in our daily operations by any fixed rule. I know florists who, in the management of their rose houses, for instance, have set days for watering, certain periods for syringing, and they adhere most religiously to rules which can only lead to unsatisfactory results. It is impossible to lay down any positive rule for watering, other than the requirements of the plants. Roses, like all other plants, should be watered only when they require it—if but once a month—and then the work must be thoroughly done; but to water a rose bed by rule or at stated intervals, must result in producing a very unfavorable condition of the soil and consequent injury to the plants.

Nor can any absolute rule be given for syringing; it is a very necessary and important operation, yet there are times when it really does more harm than good. In my own practice I syringe every day as a rule, but I am careful that other conditions are favorable and that the temperature of the house is such as to warrant the operation, and knowing the danger of getting the beds too wet at times from this constant syringing, we watch carefully for any sign of excessive moisture at the roots, when the syringe is laid aside for a day or two until the soil is again in good condition.

A. W. M.

#### Some Queries.

Is smilax a profitable crop to grow?

A.

Can some of our many readers give the history of carnation Hiuzé's White?

E.

Is not the cultivation of plants generally more a question of temperature and moisture than of soil or stimulants?

B.





The chrysanthemum family has become very large, and there seems to be a tendency to get the varieties badly mixed. For example, we bought chrysanthemum M. A. Vilmorin of a very reliable house, and it was described by them as "crimson-shaded bronze, reverse of petals golden yellow." Our plants came true to description, but we notice in the report of the Indianapolis show that Mr. Hilker exhibited this sort as a "rich red pompon." The flowers of ours were three to three and a half inches in diameter, and not on disbudded plants either. Again, we found the same variety in a lot of cut samples from a western house in the form of a Japanese anemone, pink in color, very much the same as that of Belle Paul.

Now we have three firms having the same variety in three different colors. Would it not be well for us all to obtain some work of authority on the chrysanthemum before we show our flowers next year, and be quite certain they are rightly named? We do not mean to say our Vilmorin is true to name and the two other parties mentioned are wrong, but we feel as though all us western florists need to polish up a little on this matter. Will the FLORIST tell us where we can procure a standard work on the chrysanthemum which will give us the names and descriptions of most of the varieties now in commerce? N. S.

["The Chrysanthemum," by F. W. Burbidge, an English work, gives an alphabetical list of all varieties introduced up to 1885, with descriptions of each and a list of synonyms. It can be had from this office at \$1.50 a copy. Burbidge's description of Mons. A. Vilmorin is as follows: "Japanese; orange crimson (De Laux)."—ED.]

**CHRYSANTHEMUMS FROM SEED.**—Mr. Wm. Houston, gardener at the Central Prison, Toronto, Ont., raised some 300 fine plants of chrysanthemums from seed, and when in bloom, November last, they made a superb show. While some of the blooms were not equal to those of existing kinds, the majority were considerably superior to any of the named kinds grown at the same place, in the opinion of those who saw them. The seed was planted in boxes in March last, the seedlings potted off singly about April 15, and placed in a cold frame, and planted out in the open ground the second week in May. The plants were very liberally fed.

#### Can You Afford It?

Don't let your houses become all cluttered up with rubbish and dead foliage. If your present force is not large enough to keep your place up in good shape, increase your force at once. Run your business right or not at all. Every one will occasionally run behind with their work at some seasons, but there is positively no excuse for those who endeavor to make money out of a rubbish heap twelve months in the year. It can't be done. No man can make money by half doing anything. To hear the men who run these dirty, mildey, leaky, and decay-

ing places prate that they can not afford to employ more help is enough to give the hearer a chill. They can not afford to run their places at all on the plan they are doing it. It is simply ridiculous for a man to attempt to make a profit from a place run on such principles.

Look over the places of our successful growers. Do you ever find house after house of roses which as late as this have not yet been staked, the soil never once been stirred, decaying buds and leaves "lying thick upon the ground," the snow sifting in through a thousand cracks and crevices, and mildew everywhere? It is no wonder the owner of such a place feels poor. The one incomprehensible mystery is that he has managed to keep the ship going as long as he has. These men are continually claiming that "there is no money in the business." They are right. There is most decidedly nothing to be made in it when conducted upon such principles. Their flowers are wretchedly poor, and they produce few of them. When stock is plentiful theirs is absolutely unsalable. Still, while some neighbor with a place of half the size is working a force of twice as many men, and making money, these economical growers(?) can not see the point.

If a manufacturer should allow three-fourths of his raw material to go to waste from lack of men to convert it into manufactured products, even the dullest among us would say without hesitation that he should have more men at once or reduced his capacity and buy no more raw material than he could work up without wastage. But the growers named are trying to do exactly what they would laugh at the manufacturer for attempting to do. They collect an immense quantity of raw material in their houses and then let it go to waste for lack of skilled labor to turn it into product which would bring cash. The writer knows so many such places that he is impelled to ask the owners—can you afford it? G.

#### Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1887.

Jan. 1.—Temperature, morning 5°, noon 8°, evening 2°. Wind NW. New Year's day.

2.—Tem. 11, 4, 2. NW. Sunday.

3.—Tem. 12, 4, 5. SW. Finished potting rooted cuttings of *Thymus argentea*, four in a 2½-inch pot. Cleaned alternantheras in No. 2. Potted rooted cuttings of Mt. of Snow geraniums in rose pots.

4.—Tem. 16, 23, 24. S. to SW. Potted rooted cuttings of fuchsias and Mt. of Snow geraniums.

5.—Tem. 2, 11, 8. W. to NW. Same as yesterday, and commenced propagating another lot of *Achyranthes Lindenii*.

6.—Tem. 7, 7, 4. WNW. Finished propagating *Achyranthes Lindenii* and *A. metallica*. Put in bench another lot of cuttings of Mt. of Snow geraniums. Cleaned alternantheras. Prepared old hotbed sash for reglazing.

7.—Tem. 19, 13, 10. WNW. to W. Continued putting in cuttings of Mt. of Snow geraniums and reglazing old sash.

8.—Tem. 12, 24, 17. E. to ESE. Potted last lot of rooted cuttings of *Nierembergia* and *matricarias*, and same as yesterday.

9.—Tem. 15, 20, 16. WSW. to WNW. Sunday.

10.—Tem. 10, 1, 8. W. Potted rooted cuttings of *heliotrope* in 2½-inch pots and placed in No. 2. Cleaned alternantheras in No. 3. Glazed old sashes. Pot-

ted rooted cuttings of winter-flowering begonias.

11.—Tem. 4, 26, 26. SW. Cleaned and nipped coleus. Removed potted hyacinths from frames to the greenhouses and placed under the bench. Sowed seed of stocks. Cleaned alternantheras in No. 3. Pricked out in boxes seedling pansies.

12.—Tem. 25, 34, 26. W. to NW. Sowed in boxes seed of *Antirrhinum*, *Santolina maritima*, *Lobelia Kaiser William*, *L. Crystal Palace compacta*, *Cerastium Biebersteinii*, *Nierembergia gracilis*, stocks and bellis. Cleaned and nipped coleus and alternantheras. Pricked out in boxes seedling pansies. Glazed old sashes.

13.—Tem. 30, 36, 34. SE. Commenced repairing lat shades. Potted rooted cuttings of variegated alyssums, two in a rose pot. Cleaned and spread stock geraniums.

14.—Tem. 32, 36, 24. NW. to N. Same as yesterday.

15.—Tem. 21, 28, 25. W. to SE. to SW. Continued repairing lat shades. Cleaned and nipped coleus. Pricked out in boxes seedling pansies.

#### Eucharis and Gardenia Culture.

*Eucharis* do well in a compost of turfy loam rather strong, with a fifth of well-decayed manure intermixed. In potting, the bulbs should be covered fully an inch deep. Bottom heat will assist them to make roots, it being 60° at the base of the pots. *Gardenias* do well in good fibrous peat without any admixture, and will take almost any amount of liquid manure. *Eucharis* can be flowered twice or oftener in a year by first securing good growth, and when complete, affording a rest of about six weeks, then placing the plants in heat, when they will start into flower. When in good condition they flower twice a year without any particular treatment, other than that of growing in a stove with plenty of light and liberal feeding when making fresh growth.—*Journal of Horticulture*.

#### Cleveland.

James Eadie is very ill, and fears that he may not recover are entertained.

W. H. Eckman, ex-city clerk, has embarked in the florist's business at 100 Public square—W. Hanna's old stand.

At the opening of J. M. Gasser's new store many fine flowers were shown, notably a quantity of orchids, including *cyripediums*, *cattleyas*, *odontoglossums* and *oncidiums*. The window was handsomely dressed with baskets and vases of flowers, and the interior was tastefully decorated with banks of plants, while floral designs were placed in advantageous positions. It was a meritorious exhibition of business enterprise.

At the last meeting of the Floral and Gardening Association Secretary Wm. Larrott resigned, and Miss May Grant was elected his successor. Mr. Larrott intends visiting the "old country" soon. Mrs. E. G. Campbell—who had visited the Philadelphia and New York shows—read a paper on "The new chrysanthemums of the year," describing the new plants seen at the eastern shows. Business methods received some attention, and considerable discussion was had on Mr. Jordan's paper read at the Chicago meeting of the S. A. F., which was read to our meeting from the printed report.

The death of Mr. A. C. Keudel was a severe blow to the interests of our Floral club. Mr. K. took a warm personal interest in the welfare of the club and gave

generously of his time and means to further its interests. His early death is sincerely mourned. He entered the seed business a poor boy, but owing to his steady, persevering habits, he soon rose from his position as errand-boy to that of salesman, and on the death of Mr. Stair he took the general management, acquiring sole ownership some five or six years ago. The club sent to his funeral a tribute of respect in the form of a floral roll of honor on which was inscribed "Our President."

PARIS EXHIBITION OF 1889.—The ninth division of the programme will be devoted to plants and horticultural appliances. Ground space will be allotted to exhibitors of hardy plants which may be planted early in 1888, though the exhibition will not be opened till May 6, 1889, and will remain open till Oct. 31. Greenhouses will be provided for tender plants, and two large tents, each 4,500 feet long, for exhibits of fruits, vegetables and cut flowers.

HAVE YOU renewed your subscription for 1888?

#### SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order.

**SITUATION WANTED**—By a single, practical man; Danish; age 25, 8 years experience in this and the old country. Good references. Address: R. SCHIOTT, 74 N. Leavitt St., Chicago.

**SITUATION WANTED**—By married man (English) with no family, as gardener and general manager of private or commercial place. Thoroughly versed in rose, flower and fruit culture. References first-class. Address, stating particulars and wages: GARDENER, P. O. Box 70 Shoemakerstown, Pa.

**SITUATION WANTED**—As grower and florist: 21 years' experience in growing plants and cut flowers. Growing and treatment of roses a specialty for seven years in all the States. German; single; well recommended. Address: A. GERGEN, 258 W. Jefferson St., Louisville, Ky.

**WANTED**—Hardy Plants. Florists having a stock of hardy plants of any description to sell, will please send me a list of varieties and prices, stating quantity that can be supplied. J. WILKISON ELLIOTT, Pittsburg, Pa.

**WANTED TO RENT**—By a reliable party, about 10,000 to 15,000 square feet of glass for rose culture, in vicinity of N. Y.; must be in good repair, plenty of water, etc. Address: CONFIDENTIAL, care Am. Florist, Chicago.

**WANTED**—A gardener to work in greenhouse; man with small family preferred. State wages expected. Also vegetable gardener to take care of a garden, now lawn and be useful around the house. Man with small family. Address: Oak Grove Greenhouses, La Crosse, Wis., P. E. STEVES, Supt.

**WANTED**—A first-class nurseryman with at least ten years' experience; capable of handling a nursery of 100 acres, take an interest of \$3,000 and take charge; must have best of reference as to ability; to go to Southern California. An excellent chance for a good man. English preferred. Address: J. A. C., care American Florist, Chicago.

**FOR SALE**—The stock and good will of a florist business, in a thriving Maryland town of 4,000 inhabitants. Rare chance for a young man. For particulars address: WALKER, care Am. Florist.

**FOR SALE**—The best retail and wholesale florist and seedman's business in the Northwest (population 150,000). Reason for selling, with full particulars furnished on application. Address: BATA, care American Florist, Chicago.

**FOR SALE CHEAP**—Small greenhouse 14 ft. with Hitchings boiler; also two-story dwelling house, all in good condition, at Evanston, Ill., twelve miles north of Chicago. For particulars, address: D., care American Florist, Chicago.

**FOR SALE**—Rare chance for a florist with small capital to buy a paying business; established 12 years; store and greenhouse on a principal st.; well stocked and in complete working order. Reason for selling with full particulars furnished on application to: FLORIST, 524 Market St., Camden, N. J.

**FOR SALE**—Established greenhouse, plant, and vegetable business and agency nursery, well equipped sufficient to make a nice living, in one of the most attractive and pleasant towns on the Ohio river; two railroads and river to ship on; road and city wide 10 miles off, and four other good towns near, 3,000 feet of glass; houses nearly new. Good building connected with greenhouses for office and workshop; frame dwelling with 5 rooms. Particulars on application. Address: OSCAR WRIGHT, Moundsville, W. Va.

## A. C. TUCKER,

Rose Grower,

P. O. Box 190.

NYACK, N. Y.

Orders are solicited NOW for Spring delivery for the following plants, in any size pots and in any quantity:

PERLE DES JARDIN, NIPHOTOS,  
BON SILENE, LA FRANCE,  
SOUVENIR D'UN AMI, C. MERMET,  
AMERICAN BEAUTY, BRIDE,  
PAPA GONTIER, PURITAN.

Special discount given on all orders received up to Feb. 10th, 1888. Send for circular giving prices and terms.

A. C. TUCKER.

Mention American Florist.

## 100,000 ROSES.

The leading varieties, at \$4.00 and \$5.00 per hundred.

Fine stock of VERBENAS, \$2.50 per hundred.

Large stock of BEDDING PLANTS at lowest figures. Send for Trade List, now ready.

GEO. THOMPSON & SONS,

LOUISVILLE, KY.

## TO THE TRADE.

### TWO NEW

### HYBRID \* PERPETUAL \* ROSES.

Special Award from the New Orleans Horticultural Society, March, 1887.

#### DUC DE GALESE,

Bright pink, a good bloomer, and very fragrant.

#### PRINCE BORGHESE,

Dark velvet red, a good bloomer, very fragrant.

#### PRICE LIST.

Plants, 12-inch, \$1.00 each; 20-inch, \$2.00 each; and strong plants from open ground, at \$3.00 each.

Send Orders to City Depot, St. Charles and Delord,

J. H. MENARD,

NEW ORLEANS, L. A.

## B. P. CRITCHELL & CO.

### LIST OF NEW ROSES AND

### ROSE STOCK FOR FLORISTS

Will be issued January 10th.

Will contain a fine list of STOCK for FLORISTS' use for Spring and growing for stock. Will be mailed to all addresses in the new FLORIST'S DIRECTORY. Yours Truly,

B. P. CRITCHELL & CO.,

Cincinnati, O.

### FOR SALE.

500 Jack. Roses, 4-inch, strong, at.....	\$10.00
500 Hydrangea Paniculata, 2-inch.....	3.00
500 Chamerops humilis, 3-inch, strong.....	5.00
2000 Roses, general assortment, 2-inch, strong, dormant.....	per 1,000, \$20.00; 2,50

JOSEPH E. BONSAAL, SALEM, O.

## BOUND VOLUMES OF THE AMERICAN FLORIST

### VOLUME II.

Handsomely bound in cloth with leather back and corners, and title lettered on gilt in gilt, may now be had from this office.

Price, \$2.25.

AMERICAN FLORIST CO.,

54 LA SALLE ST., CHICAGO.

## OUR SPECIALTIES.

## NOVELTIES IN ROSES

### AND OTHER PLANTS.

— ALSO —

### FLORISTS' STOCK FOR FORCING.

## HILL & CO.,

RICHMOND, IND.

### NOVELTIES IN ROSES.

Also the leading forcing varieties Tens, H. Tens and H. Perpetuals. 1,000 large roses in 6 and 7-inch pots; C. Mermet, La France, Sunset, Perles and Bon Silenes, at \$25.00 per 100. Chrysanthemums, best varieties, 5 and 6-inch pots, \$10.00 to \$20.00 per 100. Camellias, 2½-inch pots, \$5.00 per 100. Gardenia Radicans, at \$5.00 per 100. Grand Duke Jasmine, at \$6.00 to \$8.00 per 100. 3,000 American Holly, 1½ inch, at \$10.00 to \$15.00 per 100. Choice cut buds and cut flowers at lowest market prices.

JACOB SCHULZ, LOUISVILLE, KY.

## IMPORTED M. P. ROSES,

Worked low on the Manetti Stock, offer the best results to the florist, by giving plenty and giving plenty of cuttings for propagation quickly. Fine plants for sale by the 100 or 1,000, at low rates.

Address

WILLIAM H. SPOONER,

JAMAICA PLAIN, (Boston), MASS.

Budded Roses for Winter Forcing or Spring Market Sales—H. P. and Teas.

#### SPECIAL OFFER:

The following varieties, equal quantities of each, we will sell for \$10.00 per 100.

H. P.—Anne de Biesbach, La France, Gen'l Jacqueminot, Paul Neyron, Queen of Queens, Comtesse of Oxford, Jules Margottin, Anna Alexiell, Mme. Gabrielle Lohet, Marie Knorr, Marie Baumann, Gloire Lyonnaise, Her Majesty, M. de Lyon, Alfred Colomb. The following Teas at \$12.00 per 100: Perle des Jardins, Mme. Lamard, Marie Van Houtte, Mme. Falcot, Mme. Charles, Mlle. Franziska Krueger, Duchesse Mathilde, Cornelia Cook.

Catalogue on application. Dorman buds of the new H. P's of 1887—Earl of Dufferin, dark, nearly black; Lady Helen, Stewart, red. The new Teas Rose Miss Ethel Brownlow, similar to C. Mermet, very free flowering. All at \$1.00 each.

Cyclamen persicum, the plants in buds which will flower in November, \$1.00 each. American Beauty, Bennett, Papa Gontier, Niphotos in 6-inch pots, 50c. each. SCHULTHEIS BROTHERS, P. O. Box 78. COLLEGE POINT, LONG ISLAND, N. Y.

## E. BENARD,

ORLEANS, FRANCE.

### ROSES ON THEIR OWN ROOTS

A SPECIALTY.

### NURSERY STOCK OF ALL DESCRIPTIONS.

For particulars apply to

E. BENARD, JR., NILES, CAL.

## —) TREE ROSES. (—

The very FINEST and BEST quality.

GABRIEL MARC,

WOODSIDE, L. I., N. Y.

## JAMES L. BOYSON,

CAEN, (CALVADOS) FRANCE.

1st Prize for Cut Blooms, Paris, May, 1887.

My CATALOGUE of the NEW

### EUROPEAN ROSES

will be ready January 1, 1888, and will be sent FREE on application.

A large stock of the last two years varieties, as well as all the older kinds for sale.

Send for my complete Catalogue of over 1,200 varieties, with raisers' names and date of sending out

## — ROSES. —





### January Floral Styles.

BY OUR NEW YORK CORRESPONDENT.

Room decoration has never been done on such a grand scale as this season. One reason of this is that several of our decorators have had carte blanche orders. Southern foliage is brought extensively into use, and fruited orange trees. Mirrors are all curtained with soft foliage, such as asparagus or *Lygodium scandens*, but in other positions a great deal of robust garlanding is used, such as cape smilax and ivy. English holly and mistletoe will be used for a month to come. The holly is arranged like a branch or bough on wall spaces, and the berries are massed and applied here and there in clusters. Mistletoe is only displayed in large boughs. A bough that cost \$20 was suspended at a ball this week. With mistletoe and holly: scarlet tulips, poinsettias, hyacinths and stevia are employed. The latter grassy plant, although regarded as insignificant because inexpensive, makes an exquisite fringing to any brilliant cluster of blossoms.

A crescent arrangement of plants is the style at one end of an apartment where a reception is held. The plants should be high enough to show effectively above a group of ladies standing within the crescent, and they should have fine and perfect leaves at the top. A table is placed in the crescent on which to lay the bouquets. Screens of foliage are introduced in several positions in room decoration. They are highly ornamental and may be made very handsome by an artistic blending of foliage of several colors and kinds. Foliage stands are made for holding cotillon favors. These stands are light and graceful wire pyramids, which are covered with foliage and have hooks concealed in this on which the favors are attached.

Klunder introduces the crystal bubble glasses for table decoration, and there will be a run on these charming flower-holders undoubtedly. The glasses are imported and are globes, hand-painted, the flower with which they are to be filled being pictured on the glass. There are large dishes for the center and small ones for the favors, which are tied around the neck with a sash and are given away. The introduction of the crystal globe bubble glass takes place to-morrow at a daisy luncheon given by Mrs. William Walter Phelps. The center glass is very large and exquisitely painted with clusters of *Marguerites*. These are the only flowers filled in it. A wide sash of white ribbon is tied in a French loop knot around the throat of the bubble. The favors are gems, each one being like the center piece in miniature.

Bubble glasses will be presented for holiday gifts, and have been painted with blossoms such as cyclamens, lily of the

valley, pink violets and wild roses. Blue baskets, lily baskets, etc., are all the rage for souvenirs. Each basket represents the flower in shape, is lined with the color of the blossom, and has a handle entirely covered with ribbon and a loop knot. Blue daisies are much used in the baskets of that color, and have a cluster of Cottage maid tulips on one side.

The latest funeral design is formed of loose flowers on the top of a casket. A heart of red roses is fashioned, and around this a wreath of pale roses and a foliage fringing. The violet garland is the favorite funeral design. It does not interfere with the piece above described.

### Colored Flowers in Funeral Work.

The use of colored flowers in funeral work has now become almost the rule instead of an exception as was formerly the case. Bunches and wreaths of Jacq. and American Beauty roses have been frequently ordered for funerals, and on a recent occasion of this kind in Chicago, fully two-thirds of the flowers were colored. At a recent funeral in Philadelphia there were large plateaus of Am. Beauty roses and lily of the valley, of La France roses and of violets. Other designs were a pillow of La France roses with a bunch of lily of the valley at each corner. Other designs of colored flowers recently noted were a crown of crimson roses, a standing cross of Crimson King carnations with a cluster of yellow roses trailing over it, a star of violets with points of lily of the valley and eucharis in the center, a lyre of pink carnations and roses of the same color, on a base of croton leaves and yellow roses. The practice of sending those flowers which were favorites of the deceased during life is growing among flower buyers.

It is unfortunate, however, that with this, as with many other things, the advocates of this departure are apparently going to the other extreme. The use of a few colored flowers does much to relieve the dead white of the conventional funeral design, but when over-done it is to be condemned. The beauty of a wreath or bunch of crimson roses among a mass of white flowers is not to be questioned, but when all are crimson and there is no contrast the beautiful effect is entirely lost, and in its place we have simply a heavy mass of color without relief. In this as in all arrangements of flowers fine judgment and taste must be used.

A STRING OF SMILAX.—I would like to have this point definitely settled. What length should smilax be to be called a "string"? Of that marketed some is five feet, some six feet and some seven feet in length. The seven foot strings are

certainly worth more than those only five feet long. What should they average to pass as strings? H. H.

[While there is no authoritative standard, we believe that six feet is the average required, and established by custom.—Ed.]

### Christmas Trade in Boston.

The supply of flowers in this market has been below the average. Tea roses especially have been scarce, and there has been a good demand for all the fancy roses that could be obtained in all varieties. The brighter-colored kinds, however, have been most eagerly sought after. The same is true of carnations, the demand for Grace Wilder, Anna Webb, Century and other bright colors being far in excess of the supply. Violets, lily of the valley and tulips were also in short supply and were completely cleaned up. Roman hyacinths and smilax were the only things that seemed to move slowly. *Harrisii* lilies were an acceptable novelty.

The sale of holly, laurel and other evergreens was enormous, the demand for holly being unprecedented in this market. Mistletoe, as a rule, was in miserable condition, arriving in almost every instance all broken up and unsalable. At the present rate it will not take long to break up the mistletoe trade here completely. The purchase of an "original case" of mistletoe is nothing but a lottery, with the chances ten to one against the buyer. If our cousins across the water wish to retain a market for their Christmas mistletoe in this section, they must improve upon their packing.

On the whole, the florists of Boston, both wholesale and retail, have no reason to complain of their holiday trade for 1887. Plenty of good customers, good prices and everything well cleaned up has been the rule.

The growers presumably have not quite so much to be grateful for, as most of them have had but a limited cut, many indeed not having more than one-half usual crop. W. J. S.

STOLEN FLORAL DESIGNS.—The New York *Mercury* tells a strange story of a traffic in stolen floral designs, stating that certain women have made a practice of stealing floral designs from Long Island cemeteries, carrying them away secreted in their skirts. These are sold to a New York "fence" who remodels them, replacing damaged flowers with fresh ones and sells again at a good profit. Were it not for the fact that several of these women have been caught in the act, it would be hard to believe the story. What our large cities can not produce in the way of peculiar and questionable methods of making a livelihood as well as criminal practices is difficult to imagine.

**THE AMERICAN FLORIST**  
Subscription \$1.00 a year. To Europe, \$1.25.  
Advertisements, 10 Cents a Line, Agate,  
Inch, \$1.40; Column \$14.00.  
Cash with Order.  
**No Special Position Guaranteed.**  
Discounts, 3 months, 5 per cent; 6 months, 10 per  
cent; 12 months, 20 per cent.  
No reduction made for large space.  
The Advertising Department of the AMERICAN  
FLORIST is for Florists, Seedsmen, and dealers in  
wares pertaining to those lines ONLY. Please to  
remember it.  
Advertisements for January 15 issue must  
REACH US by noon, Jan. 5. Address,  
**THE AMERICAN FLORIST CO., Chicago.**

**Catalogues Received.**  
Reasner Bros., Manatee, Fla., plants;  
Herenden Mfg. Co., Geneva, N. Y.,  
steam heaters; Hiram Sibley, Rochester,  
N. Y., seeds; Henry A. Dreer, Philadel-  
phia, seeds; Thurber Whyland & Co.,  
New York, seeds; S. L. Allen & Co.,  
Philadelphia, farm and garden tools.

WE WISH a happy and prosperous New  
Year to every reader.

HAVE you commenced your diary for  
the New Year?

TAKE an INVENTORY of your stock  
now. Keep an accurate record of your  
business for the year, and *know* what  
your product costs you in rent, interest,  
labor, taxes, etc.

PLEASE watch your address label,  
where date of expiration of your sub-  
scription is noted, and see that the date  
does not pass without a renewal of your  
subscription.

THE FARM and GARDEN is an advo-  
cate of the reduction of postage on mer-  
chandise to 8 cents per pound. Well in-  
formed parties claim that it is unwise for  
advocates of postage reduction on seeds  
and plants to include merchandise in the  
list, believing that the strong opposition  
of the retail storekeepers throughout the  
union, together with the opposition of  
the express companies, as influences sure  
to defeat the entire bill.

HANDBUCH DER CONIFEREN BENEN-  
NUNG.—This neat volume of 90 pages is  
from the pen of L. Beissner, and is de-  
signed to open the way to a systematic  
nomenclature of the conifers in the man-  
ner determined by the "Congress of cono-  
isseurs and amateurs of conifers at the  
international exhibition at Dresden." Many  
important horticultural establishments  
and botanical institutions favor the  
nomenclature, and it will no doubt  
soon be generally adopted in Germany.  
Price, 2 marks. Published by Ludwig  
Moller, Erfurt.

**WELCH BROS.,**  
WHOLESALE FLORISTS,  
155 Tremont Street, BOSTON MASS.  
We make a special shipping choice Roses and  
other Flowers, carefully packed, to all points in  
Western and Middle States.  
Return Telegram is sent immediately when it  
is impossible to fill your order.

**W. F. SHERIDAN,**  
**WHOLESALE FLORIST**  
721 SIXTH AVENUE, N. Y.  
Mention American Florist.

**KENNICOTT BROS.,**  
**WHOLESALE FLORISTS.**  
ALL CUT FLOWERS IN SEASON.  
Write for price list. Consignments solicited.  
27 Washington Street, CHICAGO.

**Wholesale Markets.**  
**Cut Flowers.**  
BOSTON, Dec. 24.  
Roses, Teas..... \$10.00  
" Perles, Niphetos..... 15.00 @ 20.00  
" Mermets..... 30.00  
" Brides, La France..... 30.00  
" Am. Beauties..... 100.00  
Carnations..... 2.00 @ 3.00  
Violets..... 2.00  
Lily of the valley..... 4.00  
Romans, narcissus..... 4.00  
Tulips..... 4.00 @ 5.00  
Adiantums..... 1.50  
Harrisii lilies..... 35.00  
Smilax..... 15.00 @ 20.00  
NEW YORK, Dec. 24.  
Roses, Bon Silences..... 4.00 @ 5.00  
" Perles..... 4.00 @ 6.00  
" Niphetos..... 4.00 @ 5.00  
" Souvs..... 5.00  
" Mermets..... 10.00  
" Brides..... 12.00  
" Cousins, Bennetts..... 8.00  
La France..... 15.00  
" Jacques..... 15.00  
" Am. Beauty..... 50.00  
" Magna Charta..... 75.00  
Violets..... 1.00 @ 1.50  
Tulips..... 4.00  
"..... 5.00  
Roman hyacinths..... 3.00  
Carnations, long stems..... 2.00  
" short..... 1.00  
CHICAGO, Dec. 27.  
Roses, Perles, Niphetos, Cousins..... \$15.00  
" Safranos..... 8.00  
" Bon Silences..... 10.00  
" Mermets..... 20.00  
" Bennetts, Dukes..... 25.00 @ 30.00  
" La France..... 25.00 @ 30.00  
" Brides..... 25.00  
" Am. Beauties..... 50.00 @ 60.00  
Carnations..... 3.00 @ 5.00  
" Grace Wilder..... 5.00  
Smilax..... 18.00  
Lily of the valley..... 8.00  
Roman hyacinths, P. W. narcissus..... 5.00  
Heliotrope, hovaradia..... 2.00  
Violets..... 1.50  
Callas..... 25.00  
Poinsettias..... 15.00 @ 25.00  
Adiantum ferns..... 1.50  
PHILADELPHIA, Dec. 24.  
Roses, Teas..... \$6.75  
" Perles..... 12.00 @ 15.00  
" Niphetos..... 10.00  
" Mermets, Bennetts..... 20.00  
" La France..... 20.00 @ 25.00  
" Safranos..... 25.00  
" Cooks..... 35.00  
" Am. Beauties..... 40.00  
Carnations..... 2.00 @ 3.00  
Bonvardia..... 3.00  
Roman Hyacinths..... 8.00  
Smilax..... 20.00  
Lily of the valley..... 8.00  
Lilium Harrisii..... 25.00  
Callas..... 25.00  
Double violets..... 2.00  
Flowers in good supply and demand brisk.

**SPECIALTIES FOR JANUARY.**  
FINE ROSES.  
LILY OF THE VALLEY. ✱  
VIOLETS, TULIPS.  
✱ CYCLAMENS, ORCHIDS.  
HARRISII LILIES.  
**WM. J. STEWART,**  
67 Bromfield St., BOSTON, MASS.  
**CUT FLOWERS AT WHOLESALE**  
**N. F. MCCARTHY & CO.**  
WHOLESALE FLORISTS,  
63 Bromfield St., under Hort. Hall, Boston, Mass.  
We have made large contracts with the best Rose  
growers about Boston to handle their entire stock  
this season. Our stock will consist of Papa Gontier,  
Bennett, Pierre Guillot, American Beauty, Ma-  
met, La France, Malmison, Cook, Bride, Niphetos,  
Perle, Niel, Anna Webb and Grace Wilder pinks,  
long stems; other flowers in variety. We shall have  
a particularly large lot of Mermets and Perles, so  
that in sending to us when you fail to get them else-  
where you will feel reasonably sure of getting the best.  
Unknown parties must give satisfactory reference  
or let us send C. O. D. Write for information.

**HAMMOND & HUNTER,**  
Wholesale dealers in  
Cut Flowers and Florists' Supplies  
61 West 30th Street, NEW YORK.  
**CHAS. E. PENNOCK,**  
WHOLESALE FLORIST,  
38 SO. 16TH STREET,  
✱ PHILADELPHIA, PA.

**Thos. Young, Jr., & Co.,**  
**Wholesale Florists,**  
INCORPORATED 1885,  
20 W. 24th St., NEW YORK.  
  
**W. S. ALLEN,**  
**WHOLESALE DEALER IN CUT FLOWERS,**  
36 EAST 23rd STREET, NEW YORK.  
ESTABLISHED 1877.  
Price List sent upon application.  
**LaRoche & Stahl,**  
Florists & Commission Merchants  
—OF—  
**CUT FLOWERS.**  
1237 Chestnut Street, - PHILADELPHIA.  
Consignments Solicited. Special attention paid to  
shipping. Mention AMERICAN FLORIST.  
**C. STRAUSS & Co.**  
Telephone 977-3. WASHINGTON, D. C.  
Growers of and Wholesale Dealers in  
**ROSES and OTHER CUT FLOWERS**  
1000 Puritan Planted for coming Winter.  
**GEO. MULLEN,**  
17 CHAPMAN PLACE, (near Park House),  
BOSTON, MASS.  
**WHOLESALE AND COMMISSION DEALER IN**  
**Fresh Cut Flowers & Florists' Supplies.**  
Flowers carefully packed and shipped to all points  
in Western and Middle States.  
Orders by Telegraph, Mail, Telephone or Express  
promptly attended to.  
**THEO. ROEHRs,**  
**WHOLESALE**  
**FLORIST,**  
153 W. 31st St., NEW YORK.  
— SPECIALTIES: —  
SMILAX, NARCISSUS, LILY OF THE VALLEY,  
TULIPS, ROMAN HYACINTHS, LILACS.  
**CURRIE BROS.,**  
Growers of and Wholesale Dealers in  
**CUT FLOWERS**  
MILWAUKEE, WIS.  
SEND FOR PRICE LIST.  
**CUT FLOWERS**  
The choicest Cut Flowers at lowest market rates  
shipped C. O. D. Telephone connection. Use A. F.  
Code when ordering by telegraph. For prices, etc.,  
Address,  
**J. L. DILLON,** BLOOMSBURG, PA.  
**N. MALSH,**  
206 S. Halsted Street, CHICAGO.  
**WHOLESALE DEALER IN**  
**CUT FLOWERS,**  
AND GROWERS' AGENT.  
Regular shipping orders especially solicited.



## Seed Trade.

SEED TRADE ASSOCIATION.—William Meggat, president, Wethersfield, Conn.; Albert M. McCullough, secretary, Cincinnati, O.

## Boston.

The much talked of Boston seed combination has vanished into thin air.

Schlegel & Fottler have recently added an adjoining half-floor to their salesroom.

Jos. Breck & Sons have admitted to the firm, Mr. Munson—now in charge of their seed department.

R. & J. Farquhar & Co. will greatly enlarge their store accommodation Jan. 1, having leased for a long term of years the building No. 16 South Market street. They will connect it with their store at No. 10.

C. H. Thompson & Co., Clinton street, have added two fine floors to their agricultural tool department, giving them one of the best stores in the city in their line of business. They will give up their branch seed store from Merchants Row to Clinton street, and their Merchants Row place will be occupied by Messrs. Hovey & Co. who remove from their old stand.

## Warehousemen Responsible for Damage by Frost.

An interesting case has just been decided in the Superior Court of New York, in which plaintiff stored 15,000 tuberos bulbous from a warehouseman on the representation by him that his building was "free from frost," and "they would keep there all right." The court held that such language "conveyed a warranty that the building was frost-proof," and that the plaintiff, acting on such warranty, stored them there, which he would not have done had the answer been different, and subsequently the bulbs freezing, he was entitled to recover.

The defendants tried to maintain the ground that their expression regarding the condition of their building was one of opinion only, and not a warranty. This the court denied and cited a parallel case in which a warehouseman represented the exterior of his building as fire-proof, and in a trial arising from such statement the court, in deciding for plaintiff, held as follows: "We think, therefore, that the defendant must be regarded as stating a fact, and not as expressing a mere opinion when he described the exterior—that is, the whole exterior—of his buildings as fire-proof. Such statement is not to be classed with those relating to value or prospective profits, or prospects of business, or assertions in regard to a speculative matter, concerning any of which men may differ. It relates to something accomplished, to an existing fact as distinguished from one yet to come into existence; it was made after calling to mind the use to which the buildings were to be put."

## Primula Seed.

(Translated from the French, by A. K.)

When primula growers raise their own seed it is seldom they use fresh seed. Should this be done exceptionally, they only use seed of their latest sowing, never from the first sowings of the season, for the simple reason that the seed of these are never sufficiently ripened when sowing season sets in. Growers of primula should be most careful to select their seed only from fixed strains and not from general varieties, which may prove

very acceptable in one season, but sport back again in a wonderful manner to irregular productions hard to sell in any market. A fine primula should come true from seed in a proportion of from eighty to ninety per cent., and should show many leaves on short, strong stems. The colors should be pure, be it white or bright red; the flowers well fimbriated and arranged profusely in umbels borne on a short stalk slightly above the foliage.

Should a grower not care to raise his own seed, he should be particular to buy of a reputed firm only the best of seed, and not look at the price to economize in his investments. The best are those of the previous season's growth, which will come up well, whilst seed which is two years old is sure to show a falling off of fifty per cent. The first sowing is done between the 15th and 30th of April, the second from the 15th to 30th of May, and the third from the 15th to 30th of June. The first sowing flowers November to December; the second, December to January; the third from January to April, and this latter sowing produces the great seed crop of the season.

The above article, published under the auspices of the Association Horticole Lyonnaise, was sent in reply to the constant demand in this country for the same year's crop of Primula seed during June, July and August made on the seedsmen, who when they deliver fresh crop bear frequently of poor results, and their seed is suspected of being too old. As the same strain, however, later in the season gives full satisfaction, it is reasonable to infer that the demand for the current year's seed crop of primulas should not be made before the middle of September for imported seeds, when both grower and seedsmen will be benefited. A. R.

ALVIN F. COLE of Bristol, R. I. has removed to Minneapolis, Minn., where he will engage in seed growing.

## The Violet.

At the meeting of the Gardeners' and Florists' Club of Boston, Dec. 6, a valuable paper on the violet was read by Mr. L. H. Foster of Dorchester.

The essayist said that as to varieties he believed the Maria Louise to be the best for the Boston market, as the color is dark and the keeping qualities the best. He had grown the Maria Louise from the same stock which he began with eight years ago, and the plants had been grown on the same land each year with one exception, when he greensoiled the land putting in oats first and plowing that in, then sowing Hungarian grass and turning that under also. He plants the violets out eight inches apart in the rows with a space of twelve inches between the rows so they may be easily cultivated with a hoe, this being all the care they receive until the latter part of August. There was no sign of disease in this stock of plants until last year when about a dozen plants in 10,000 showed the spot in the field in August.

He thought that to give good clumps for winter blooming, violets should be planted out about the 10th to the 15th of May so they will become well rooted before the hot, dry season comes on. Provided they do this they will carry through the summer. Beware of late planting if you want good plants in the fall. They should be moved into the house early and well cleaned in the field. After removing to the house and once cleaning,

incessant care and watchfulness are necessary; early and late airing, watering and cleaning must be attended to with as much care as with the rose. He was now on the second cleaning of the plants put into the house this year and from now on till the middle of January is the critical time, requiring all the skill of the grower. If they are well and healthy then, there will be comparatively little trouble thereafter, though the care and attention to detail can not be relaxed. He would sum up the subject of growth thus: Have clean, healthy cuttings in spring, plant by May 15, keep clean from weeds through summer, clean from runners and decayed leaves by Sept. 1, remove to winter quarters by Oct. 15 at the latest, then watch, work and think.

In regard to the disease he believed plants were susceptible to certain diseases, some subject to inherent through hereditary taint, others to local causes or importations as is the case with the human family. As to how it comes there are many theories but the secret still remains hidden. One grower thinks a change of plants from another locality is a remedy and as an illustration of the fallacy of this theory he related the experience of a grower in Newport who grew violets in frames for several years and had no disease. One spring he found a little spot and thereupon threw away all his plants and procured others from a distance which were supposed to be healthy. The next fall he had not a healthy plant. How should we account for that? Another says it is a minute insect which bores into the stem. He had never seen the insect and hoped it was only a supposition. Another says starve in the field and feed in the house, but he did not think this fully met the case as he believed large plants were needed to insure an abundance of bloom. Another says we grow them too warm. Last winter he visited a neighbor's rose house which was some fifteen feet high and ventilated from the top. Some violets were planted on the front bench at least ten feet from the ventilator and over two 4-inch hot water pipes and they were doing well all the winter—some spot, but producing good colored large flowers. How is that accounted for? Still another says too much water is used. A florist near him who grows several thousand plants, has a dugout or onesash frame connected with the foot of a rose house and the drip is such that the plants are literally growing in a bog, and from these he gets splendid flowers. Case after case might be enumerated where objections have been met with the very conditions objected to and yet, let another try to grow them under the same conditions and utter failure ensues.

In conclusion, he had found that as now grown there was not any very large fortune in growing violets. Provided they could be grown easily, without disease, he questioned whether as many as now try them would grow them, as there would not be any money in them, for prices would rule so low that probably one would not make any more from the quantity picked at low prices, than now with the labor expended and the relatively high prices.

BOUVARIAS FOR CUT BLOOM.—Will some one tell me, from actual experience, which of the two is the best way to obtain the most bloom—first, when taking the plants up from the open ground to grow them in pots; or, second, to plant them out on benches in the greenhouse?

FLORIST.



**TRY DREER'S GARDEN SEEDS**  
Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free.  
**HENRY A. DREER,**  
Philadelphia

**MELON SEEDS** 14c. to 40c. per pound. Send for **PRICE LIST**: Odella, Black Spanish, Kolo Gem, Dark King, Iron Glad, Pride of Georgia, Hackensack, Bird, Golden Gem, Banana. **FREEMAN HURFF,** Swedesboro, N. J.

**PAPER SEED BAGS,** PLAIN OR PRINTED. BEST QUALITY AND AT LOWEST PRICES. Many years' experience in the Seed Business enables me to make Catalogue Work and Seed Bag Printing a Specialty. Refer to Phila. seedsmen.  
**GEO. A. KARR,** Philadelphia, Pa.

**SIBLEY'S TESTED SEED**  
CATALOGUE FREE! Containing all the latest novelties and standard varieties of Garden, Field and Flower Seeds. Gardeners everywhere should consult it before purchasing. Stocks pure and fresh, prices reasonable. Address: **Thos. Sibley & Co.,** Rochester, N. Y., or Chicago, Ills.

**SALZER'S PANSIES**  
"Lead the World in Exquisite Colorings and Marvelous Size."  
Angel's Robe Pansy, a new pure white pansy for bordering and cemetery planting.  
Write for florists' and market gardeners wholesale list.  
**JOHN A. SALZER,**  
La Crosse, Wis.

Over 6,000,000 PEOPLE USE  
**FERRY'S SEEDS**  
D. M. FERRY & CO. are admitted to be the **LARGEST SEEDSMEN** in the world.  
D. M. FERRY's Illustrated, Price Reduced **SEED ANNUAL** for 1888 will be mailed FREE to all applicants, and to last season's customers without ordering it. Invaluable to all. Every one using Garden, Field or Flower Seeds should write for it. Address **D. M. FERRY & CO.,** Detroit, Mich.

Our Annual, **A YEAR'S WORK IN THE GARDEN.** Of everything worth growing and how to grow it. Ready now. **SENT FREE.** Write for it. **HARMAN & SON,** South Bend, Ind.

**A. BLANC,**  
ENGRAVER FOR



**Florists and Seedsmen.**

LARGEST AND BEST COLLECTION OF HORTICULTURAL ELECTROS IN THE WORLD.

Send for list of Catalogues.  
**314 North 11th Street, Philadelphia.**

**BURPEE'S FARM ANNUAL FOR 1888**  
Will be sent FREE to all who write for it. It is a Handsome Book of 128 pp., with hundreds of illustrations Colored Plates, and tells about the **BEST GARDEN, FARM, and FLOWER SEEDS,** Bulbs, Plants, and valuable New Books on Garden Topics. It describes Rare Novelties in **VEGETABLES and FLOWERS**, of real value, which cannot be obtained elsewhere. Send address on a postal for the most complete Catalogue published, to  
**W. ATLEE BURPEE & CO., PHILADELPHIA, PA.**



**PLANET JR. GARDEN DRILLS. WHEEL HOES. HORSE HOES. FIRE FLY.**  
Each one of these POPULAR TOOLS has been either **REMODELED or IMPROVED.** They are more complete, simple, practical and stronger than you can imagine; so look them over carefully.  
**NEW STYLES. NEW PRICES.** **S. L. ALLEN & CO.,** Patents & Mfrs., 127-129 Catharine St. Philadelphia, Pa.

**FREE** To All Seed Buyers Our complete illustrated Annual of Tested Seeds, Bulbs, Plants, etc., tells all about seeds and gardening. Colored Plates. **A. W. LIVINGSTON'S SONS.**

**Warranted Seed.** I have founded my business on the belief that the public are anxious to get their seed directly from the grower. Raising a large proportion of my seed enables me to warrant its freshness and purity, as my Vegetable and Flower Seed Catalogue for 1888, FREE for every son and daughter of Adam. It is liberally illustrated with engravings made directly from photographs of vegetables grown on my seed farms. Besides an immense variety of standard seed, you will find in it some valuable new vegetables not found in any other catalogue. As the original introduction of the Ellipse Beet, Burbank and Early Ohio Potatoes, Hubbard Squash, Deephead Cabbage, Cory Corn, and a score of other valuable vegetables. I invite the patronage of  
**JAMES J. H. GREGORY,** Marblehead, Mass.

**DO YOU WANT SEEDS?**  
Prices low for reliable seeds. Sold last season to Thousands of Farmers and Gardeners with no complaints. We are Growers as well as Dealers. Originators of Apple, Favorite and Red Yew Tomatoes, &c. Box 141, Columbus, O.

**GARDEN, FIELD, FLOWER SEEDS, PLANTS, BULBS, AND GARDEN REQUISITES.**  
**W. W. RAWSON & CO.**  
34 South Market Street, Boston, Mass.  
Importers and Growers of Garden, Field and Flower Seeds.

**NEW BOOKS ON GARDENING.**  
**CELEBRITY AND ITS CULTIVATION,** by W. W. Rawson, 25 Cents.  
**SUCCESS IN MARKET GARDENING** and Vegetable Growers' Manual, by W. W. Rawson. Practical Market Gardener. The most instructive work of the kind ever published, full of important information and facts, and to all growers of vegetables in large or small quantities. 300 pages, fully illustrated, sent post-paid, by mail, upon receipt of \$1.00.

**GOLDMAN'S ATOMIZER AND SPRINKLER**  
FOR A THOUSAND AND ONE USES. COMMENT UNNECESSARY.

Practical and Useful. You will not part with it.

For Flowers, Window Gardening, House Plants, Decorating Insides and for various fine sprays. Most natural substitute for fog or dew. By dipping in water while closed, fills instantly. Ball finely perforated; spray controlled by pressure of hand. Size of lemon squeezer. Weight, 5 oz. Exclusive Territory to Agents. Sells on its own merits; no talk. Sample by mail, 50 cts. This is the Atomizer that sold so well at the Danbury, Albany and other Fairs. Florists and Seedsmen, show it to your customers. Sells fast; good profit. Excellent for indoor plants. Send for illustrated pamphlet and price to the trade. Mention this paper.

**M. GOLDMUN,** Manufacturer, Pittsfield, Mass.

**THE EMERSON PATENT BINDER**  
Price postpaid, 75 CENTS.  
Address: **American Florist Co.,** Chicago.

Showing the appearance of the Binder when quite full of The American Florist. Every subscriber should have one. Order at once furnished on application.

**W. W. RAWSON & CO.**  
34 South Market Street, Boston, Mass.  
Importers and Growers of Garden, Field and Flower Seeds.

**B. K. BLISS & SONS,** formerly of New York. For large and profusely illustrated and made more attractive by the addition of a richly illustrated cover, beautiful colored plates, and numerous life-like illustrations of rare and beautiful flowers and choice vegetables, including many novelties of rare merit, will be mailed free to customers of last year, and to all others upon receipt of Ten Cents, which will be refunded with first order. **B. K. Bliss,** surviving partner of B. K. Bliss & Sons, is now with us, and respectfully solicits the patronage of former customers.

**B. B. NOURSE & CO.,**  
WESTBORO, MASS.

Manufacturers of  
**POT PLANT, GARDEN AND VERANDA TRELLISES, TREE AND PLANT STAKES.**

**PLANTS-SEEDS-BULBS**  
SMALL FRUITS WITH NOVELTIES  
C. E. ALLEN BRATTLEBORO VT.

**M. M. BAYERSDORFER & CO.**  
56 N. 4th Street, Philadelphia, Pa.,  
Manufacturers and Importers of

**Baskets & Florists' Supplies**

**NEW CATALOGUE READY,** and sent free on application.

**ENGRAVING DIRECT FROM PHOTOGRAPH.**  
NO DRAWING REQUIRED.  
NO HAND WORK NECESSARY.  
**CHEAP, ARTISTIC**  
SEND COPY **CROSSCUP & WEST ENGL. CO.**  
FOR ESTIMATE. 9-13 FILBERT ST. PHILA. PA.



## Express Shipments.

Some discussion was had at the last meeting of the National society on the question of recovering from express companies for the value of shipments of cut flowers and plants which were delayed or lost in transit, during which some members stated that claims against the companies could seldom be collected. The experience of the writer has been that the companies are usually willing to make good a loss which can be shown to have occurred through negligence or error on the part of their employees. He has personally collected quite a number of such claims, and as there is a certain method of procedure which should be followed to secure attention to the claim, the details will probably be of interest.

In every case the shipper will have received a letter of complaint from the consignee. First be sure that the package was delivered to the company on time; then write out a simple statement of the case, stating when delivered to the company, giving the exact hour if possible, what train it should have left on, and the time it finally reached its destination. Then pin the company's receipt for the package, a copy of the bill for the goods, the consignee's letter and your statement of the case together and take the same to the claim agent of the company. Each company has an official to look after just such matters. Now don't imagine for a moment that the money will be passed right out to you. The company must have time to investigate the matter, and their huge machinery naturally revolves slowly.\* It may take only a few weeks or it may require two or three months. If not heard from within that time, ask the claim agent if he hadn't better send another tracer after the first one. Don't get excited about it and call the agent unchristian names, he is only one wheel of the machine and cannot move the whole alone.

\* Express companies are continually having claims made against them which any one—except possibly the claimant—can see are not just, and they naturally look with doubt upon all claims until they find that they are just. Give them time to demonstrate this fact to their own satisfaction and in most cases you will be allowed the value of the goods lost. You cannot, however, recover for any loss occasioned by the delay; nothing further than the actual value of the plants or flowers as billed. G.

## Flowers for Statesmen.

At the opening of the fiftieth congress Dec. 5, says the Washington Star: "The floral tributes to senators were unusual in quantity and quality. Senator Daniels was made a decided favorite in this respect, his desk and chair being literally covered and surrounded with magnificent designs. On the desk was a mammoth floral shield, bearing on its front the coat-of-arms of Virginia. There were also three very large horseshoes wrought in flowers and greens and each having a basket of handsome flowers pendant from the center of the arch. A ladder of fame composed of flowers and buds of different varieties and bearing on the topmost round the words 'U. S. Senate.' There were also several large baskets of the very choicest flowers, besides smaller baskets and bouquets. It was remarked by some of the old attaches of the senate that in size and design, quantity and beauty, the floral offerings to Senator Daniels exceeded anything of the kind hitherto sent to a senator.

"To Senator Faulkner was sent a chair made of blue, pink, and purple immortelles with a card attached extending the compliments of Mrs. C. B. Johnson, and adding, 'take a seat, Senator, we will give you three chairs.' Senator Turpie was remembered with a large basket of choice flowers; Senator Beck received a bunch of cut flowers; Senator Voorhees a large baskets of flowers and a bouquet; Senator Gorman a horseshoe resting upon an easel; Senator Blackburn a basket; Senator Payne two baskets; Senator Riddleberger 'a harp of Eritu' from the Clann-Gael of Philadelphia; Senators Mitchell, Platte, Palmer, Davis, Cullom, and Manderson each a basket of flowers; Senator Stewart two baskets, and Senator Paddock a bouquet.

"In the House, all the flowers seemed to have combined themselves into an immense horseshoe with the horn of plenty and lone star, in front of Hon. T. J. Campbell's desk. This piece was sent to him, as an inscription in red letters told, by the 'Oriental Club' of New York. It was so large that there was great difficulty in finding a place for it. Finally it was put in the open space in front of the speaker's desk, and completely cut off the view of eight desks, two abreast. It stood up like the high hat at the theatre, only twice as gorgeous. It was more than seven feet high, of pinks, roses and a great variety of other flowers. The only other flowers visible were a modest stand on the Speaker's desk and a basket which an old lady carried about in her hand while she made a wild search for some one she wanted to bestow it upon. But during the roll call the flowers that had before been missed began to come in. A green harp was placed on the desk of Mr. Randall. A large plaque of roses and pinks, with 'Labor's Champion' written in violets upon its face, which was placed on the desk Frank Lawler used to occupy, but the owner was not there, or was hid behind the present. An immense combination piece was placed in front of Mr. Montgomery of Kentucky. A beautiful willow basket, full of pinks and roses, was given to Mr. McAdoo. Mr. Hatch was not forgotten, and Holmes, Harmer, Browne, Glover and many of the new members were remembered."

## Wanted a Full Dollar's Worth.

The following mail order for cut flowers from a lady was recently received by a florist not more than a thousand miles from Chicago. We insert it for the amusement of our readers:

"Mr. —: Will you please send in a box on Saturday, flowers for the inclosed amount (one dollar) as many as you can. Chrysanthemums (Felicity), different shades of yellow and gold brown. Some pinks, mignonette and violets, and a spray of lemon verberna please and oblige. Will you put in the foliage of the pinks for the green? And if you have one rose of the American Beauty I would like that put in the box. I hope to go to see the flowers soon.

"Very respectfully, — —."

## Steam Heating.

How many square feet of greenhouse space will a lineal foot of inch pipe with steam heat? Or, what is the equivalent value of 1-inch pipe heated with hot water, and 1-inch pipe heated with steam? Will some user of steam please enlighten us. P. & W.

LOUISVILLE, KY.—The Kentucky State Hort. society met at Fern Creek Dec. 15.

ROCHESTER, N. Y.—J. O. Pridmore recently entered the state matrimonial.

ALLEGHENY CITY, PA.—John Bader has built two fine new rose houses, each 156 x 20, to be heated by natural gas fuel.

AUBURN, N. Y.—Alfred Patrick has added three new houses—one 50 x 18 and two 50 x 12 each. Jacob Wride has also just completed two well built houses 67 x 14 each. Jas. Morgan's old houses have been overhauled and a new one 20 x 75 added.

TRENTON, N. J.—The State Hort. society adjourned Dec. 15, after electing the following officers: President, David Baird of Manalapan; vice-president, C. W. Idell, Hoboken; secretary, E. Williams, Montclair; treasurer, Chas. L. Jones, Newark; executive committee, W. B. Ward, Newark; J. C. Van Doren, Manalapan; C. W. Idell, Hoboken; E. P. Beebe, Elizabeth; John M. White, New Brunswick. Secretary Williams read an interesting paper on "Annual and Perennial Flower Seeds for the Home Garden." He stated that annual flowers—so frequently disregarded by many people—were worthy of being more generally cultivated. Action was taken toward making the society an incorporated body.

## NEW BEGONIA

## SEMPERFLORENS GIGANTEA ROSEA

\$1.50 per doz.; \$8.00 per 100; \$75.00 per 1,000.

A general Florist Stock low. Send for wholesale price list.

C. H. MURPHEY,  
URBANA, O.

## FLOWER SEEDS

FOR FLORISTS, NOW READY.

J. C. VAUGHAN, CHICAGO.

## NEW COLEUS.

NEW DISTINCT MAMMOTH  
VERBENAS

Never offered before; far surpassing the old set in vigor and profuseness of bloom, \$1.50 each set.

Our Wholesale Price List of

PLANTS, NEW ROSES, ETC.,

will be ready January 10th.

100,000 ROSES IN FIFTY MOST POPULAR

\* SORTS IN STOCK. \*

ADDRESS

NANZ & NEUNER,

LOUISVILLE, KY.

## FOR SALE.

## THE CUTS

USED IN ILLUSTRATING THIS PAPER.

Write for prices on any which you have seen in previous issues and would like.

AMERICAN FLORIST CO.

CHICAGO.

**AUGUST RÖLKER & SONS,**  
44 Dey St., NEW YORK,  
Supply the Trade with  
**SEEDS, BULBS,**  
And all kinds of  
**FLORISTS' SUPPLIES.**  
1888 Trade List for Seeds now ready.

**BULBS, IMMORTELLES.**  
**J. A. DE VEER,**  
(Formerly of DeVeer & Boomkamp.)

19 Broadway, New York.

SOLE AGENT FOR  
**GENERAL BULB CO.,** Vogelenzang, (Holland.)  
**LS. BREMOND FILS,** Orléans, (France.)

Offers to the trade, net without engagement:  
Lily of the Valley (true Berlin pips), per 1,000 \$10.00,  
in original cases of 500, \$2.00. Per 100, per 1000  
Lilium Auratum, large bulbs, \$5.00 \$50.00  
Excelior Pearl Tuberoses, extra, 2.00 15.00  
Gladioli Colville, "The Bride" 3.50 30.00  
Choice **DUTCH FORCING BULBS** yet on  
hand at greatly reduced prices. Per 100, Per 1000

Mixed Hyacinths in four colors, separate, double and single,.....	\$5.00	\$25.00
Good named Hyacinths, 10 to 10 var.,.....	3.50	32.00
Picked Hyacinths, 20 exhibition var.,.....	9.00	80.00
Tulips, 12 fine forcing varieties, including white and yellow,.....	1.50	12.00
Tulips, 12 best varieties,.....	2.00	15.00
" Duc van Thol, scarlet,.....	.75	6.00
" Finest forcing mixture, single,.....	.40	3.00
" " " double,.....	1.20	11.00
Narcissus in fine sorts,.....	1.75	15.00
Jonquils, single, sweet-scented,.....	1.00	9.00
" " " double,.....	2.00	10.00
" Campernelles, single,.....	1.10	10.00
Crocus, in 5 separate colors or mixed,.....	.30	2.50
Crown Imperials, finest mixed,.....	7.00	
Star of Bethlehem, fine for forcing,.....	1.75	8.00
Iris, Spanish mixed,.....	.40	3.00
" English,.....	1.00	8.00
Scillas, in sorts, white, blue, etc.,.....	1.50	9.00
Anemones, single mixed,.....	.60	5.00
" " double,.....	1.25	10.00
" Fulgens, single or double,.....	2.00	
Ranunculus, Persian mixed,.....	.60	5.00
" Turban ".....	.75	
" French ".....	.50	4.00

For other bulbs, grasses, cape flowers, milkweed balls, sea oats, pampas plumes, etc., see price list, mailed on application.

**R. VAN DER SCHOOT & SON,**  
WHOLESALE  
**BULB GROWERS,**  
HILLEGOM, HOLLAND.

**EXTRA STRONG CLEMATIS**  
FROM THE  
**BOSKOOP HOLLAND NURSERY ASSOCIATION**  
Ready for immediate delivery.

Address **C. H. JOOSTEN,**  
Importer of Plants and Bulbs.  
**3 COENTJES SLIP, NEW YORK.**

**ROTTED PEAT, FIBROUS PEAT, AND PACKING MOSS,**  
\$1.00 per Barrel.

**Sphagnum Moss, \$2.00 per Bbl.**  
A discount of 25 per cent. on all orders of five barrels or upwards. Cash with orders.

**THE BARNEGAT MOSS AND PEAT CO.,**  
BARNEGAT, NEW JERSEY.

**DAHLIA** \* \*  
\* **ODORATA.**

Sweet-scented Single Dahlia, very dark black-brown, excellent for fine floral work, offered in original roots, at

\$2.50 EACH; 10 FOR \$22.50.

**J. SIEKMANN,**  
Kostritz (Thuringia), GERMANY.

Mention American Florist.

A CIRCULAR OF DESCRIPTION, &C., FOR OUR

New Tomato, "Volunteer,"

— AND —

New "Carnation Striped" Zinnias,

Will be sent to the trade during this month, in time to insert in Spring Catalogues.

**V. M. HALLOCK & SON,**  
**QUEENS, NEW YORK.**

**READY NOW:**

Fine LILY of the VALLEY PIPS and SPIREA JAPONICA CLUMPS. Extra FINE TUBEROSE BULBS, PEARL and ITALIAN.

**STILL IN STOCK:**

HYACINTHS, TULIPS, NARCISSUS, ROMAN HYACINTHS, LILUM CANDIDUM, LILUM AURATUM, LILUM RUBRUM, LONGIFLORUM, &C., &C.

**FOR THE HOLIDAYS:**

HOLLY, BOUQUET GREEN, WREATHING, HOLLY WREATHS, PAMPAS PLUMES, IMMORTELLES, &c., &c.

Send for Catalogue and Special Holiday List.

**JAMES KING,**

170 LAKE ST., CHICAGO.



**F. E. McALLISTER,**

— WHOLESALE DEALER IN —

**Seeds** For the Florist Market, Garden-er and Farmer. **Requisites** Such as Baskets, Immortelles, Grasses, Mosses, Boquet Papers, Pampas Plumes, etc. **Bulbs** For the Green-house or Garden.

22 Dey Street, - - - NEW YORK.

**JAPAN LILIES, LILY OF THE VALLEY**  
**AND SPIREAS, NOW READY.**

**CURRIE BROS.,** Seedsmen and Florists,

108 Wisconsin St., and 312 Broadway, MILWAUKEE, WIS.

SEND FOR CATALOGUE.

**SEGERS BROTHERS,**  
GROWERS OF  
**HOLLAND BULBS.**

OUR SPECIALTIES ARE:

Holland Hyacinths and Tulips, in any quantity; also Crocuses, Narcissus, Daffodils, Liliums, Lily of the Valley, Gladiolus The Bride, Anemones, Ranunculus, Spiræa Japonica, etc.

References as to quality of our Bulbs, etc., to several United States Florists and Seedsmen.

Send for Wholesale Catalogue.

**LISSE, NEAR HAARLEM, HOLLAND.**  
WHOLESALE ONLY. NO AGENTS.

**RHODODENDRONS**

Being the representatives in the U. S. for Messrs.

Jno. Watterer & Sons,

The great English Rhododendron growers, we are prepared to furnish Rhododendrons of all sizes and in any quantity, at prices lower than ever before offered in this country. Orders now solicited for spring delivery. Prices on application.

B. F. ELLIOTT CO. Pittsburgh, Pa.

**BULBS! BULBS! BULBS!**

Before placing your order for HOLLAND BULBS write me for my trade list. I have made special arrangements with some of the largest growers in Holland, and can offer you TERMS and PRICES better than any other firm does. All orders over ten dollars will receive a CREDIT until May 1, 1888. Write for terms and prices.

E. HIPPARD, Youngstown, Ohio.



### The Philadelphia Florist Club.

This, I believe, was the first club of its kind in the country; it originated a little over a year ago. It holds its meetings in the evenings and once a month. There is a good attendance and the members enjoy it thoroughly. A happy, brotherly feeling prevails and there are no parties, jealousies or bickerings. Strangers are welcomed, and I can assure you, entertained right royally. It has brought together the growers and dealers from all around the city, and many who before were strangers to each other now belong to one fraternal band. Besides its social pleasures it has its mutual advantages. Papers are read and discussed and business matters talked about. And as all the members are florists, they are well posted and know what they are talking about and waste no time in gush or gas.

But I could not help thinking as I sat among them that if some of the members had brought in a few carnations, roses or other flowers and had a talk about them there, it would create a greater interest than would the mere reading of a paper and discussing it. For instance, the subject for discussion that evening was "Cross-fertilization and the practical benefits to be derived from it." Now if Lonsdale or Swayne had brought in a set of their new carnations, Harris his chrysanthemums, and Ball his "hybrid" ferns, and these had been used to illustrate the subject and passed around to be examined by the members present, a never-to-be-forgotten impression would have been made, the silent members induced to talk, and latent interest revived. This would not call for an exhibition of flowers at all, a dozen or so of blossoms altogether would suffice.

For next meeting I think the subject for discussion is to be "How best to Cut, Pack and Ship Flowers." Well, I believe every grower thinks he is doing this now as well as it can possibly be done. But no doubt the dealer can point out some defects so far as packing and shipping are concerned. Then wouldn't it be very interesting if the essayist would illustrate his talk by bringing along a basket or box of flowers, and pack and unpack them before the members? I like to read, but never to listen to an elaborate essay, but I do love to listen to or take part in a short, plain, practical, matter-of-fact talk.

W. F.

### Preserving Lumber.

The Elieard Floral Co. of St. Louis, writes us in regard to the merits of a new process for preserving lumber from decay, and which they believe will be of value to builders of greenhouses, which of all buildings are most subject to decay through the alternate soaking and drying they receive. They have the past summer built a rose house 20 x 104, constructed entirely of the prepared lumber (pine) as a test of the material. They have, of course, so far been able to ascertain only that the chemicals used are not injurious to the plants, which they state have made good roots and splendid progress. The prepared lumber is guaranteed to last three times as long as that not treated, and the treatment costs but little.

The lumber is prepared by impregnating it with a solution of chloride of zinc and sulphate of lime. It is placed in large metal cylinders and steam introduced until the wood is heated to the boiling point thereby destroying the fermentable elements and the sap, after which the steam is blown off and the

solution above named is let in and heated by means of steam coils, being left to operate on the lumber under a pressure of 60 to 100 lbs. until impregnation is complete. One cubic foot of white pine or cypress will absorb six to seven pounds of the solution. It is known as the Zinc-Gypsum process. Works for preparing the lumber have been erected at St. Louis and are conducted by a company styled the American Wood Preserving Co.

The value of anything of this kind can only be demonstrated by the lapse of time, and the result of this experiment of the Elieard Floral Co. will be looked for with interest, as the value of the process—if the claims made are verified—can not but be great to builders of plant houses.

**CRUDE OIL.**—The use of this for fuel is attended with some danger, unless considerable care is used. At Critchell's greenhouses near Cincinnati, where this fuel is used, an explosion occurred from taking a lighted lantern near the uncovered man-hole of a tank on a car from which the crude oil was being transferred to the storage tank at the greenhouses. An employee by the name of Hoar was burned about the face, neck and hands, and cut in the wrist with the broken glass from the lantern globe, but his injuries are not considered dangerous.

**WASHINGTON.**—The local florists are agitated over the competition in plant growing of the Reform School. It is stated that the authorities at the school sell plants and flowers at considerably less than the actual cost of production, which of course works serious injury to the florists who have to look to their sales to pay expenses, while the school is maintained at the expense of the government.

## GROWTAGE'S PATENT BUILDING FOR HORTICULTURE



—GLAZED WITHOUT PUTTY.—  
Endorsed by the New York Horticultural Society.  
Illustrated Circular mailed on application.  
Plans and estimates given for every description of Horticultural Buildings.

**H. J. GROWTAGE,**  
76 Myrtle Avenue, BROOKLYN, N. Y.



### Florist's Letters

Patent applied for.  
These letters are made of the best, immortelles, wired on wood or metal frames with holes to insert toolsticks.

**Prices on Wood Frames:**  
2in. Purple... Per 100 \$3.00  
Less than 100, 35c.  
2 1/2 in. Purple... Per 100 \$4.00  
Send for sample. Postage 10c. per 100. Script lettering on Metal Frames any word, 5c. per letter.  
Designs, Monograms, etc.

**W. C. KRICK,**  
1107 Broadway, Brooklyn, N. Y.  
**J. C. VACCHAN,** Chicago,  
Agt. west of Pennsylvania.

Mention American Florist.

Delegates to the next convention will travel via the



**Pullman Car Line**  
TO AND FROM  
Louisville, Indianapolis, Chicago, St. Paul, St. Louis, and all the resorts of Florida and the South. For full information address  
**E. O. McCormick, Gen. Passenger Ag't, Chicago.**

# THE AMERICAN GARDEN

PROSPECTUS FOR 1888.

Marked as have been the improvements in the magazine during 1887, the coming year will show much greater advances. Some of the more notable features of special interest to florists follow:

**SPECIAL NUMBERS.** Already in preparation are special numbers on the IRIS and JAPAN MAPLES, and others of equal or greater interest will follow.

**AN ORCHID DEPARTMENT,** already begun, will be a feature of the year, from prominent and popular writers, including E. S. Kand, of Brazil, W. A. Manda, and others.

**ROSES** will have a special department, written for the beginner as well as the more experienced.

**JOHN THORPE,** Founder of the Society of American Florists, promises to contribute exhaustive papers on the PELARGONIUM (Geranium) and the CARNATION, and other matters of value.

**NOTES FROM ST. FEREALE DE PONSOMBY** are from "E. Lance," the fearless and caustic critic of all horticultural frauds and absurdities.

**PROPAGATION OF PLANTS** will receive special attention by some of the most skilled cultivators, and will include all classes of fruits, trees, flowering and ornamental plants, etc.

**NEW PLANTS,** or those not commonly grown, will be described by W. A. Manda, of Harvard Botanic Gardens, Wm. Falconer, and other noted gardeners.

**GREENHOUSE CONSTRUCTION,** including the Conservatory, will be discussed in a series of practical articles, freely illustrated and giving the experiences of practical men.

**SCHOOL GARDENING AND RAILROAD GARDENING** are claimed for horticulture, and will have our continued careful attention.

All Horticulturists are invited to co-operate with us in our efforts to extend the love of flowers and gardening among the people, for that helps trade.

**SUBSCRIPTION PRICE, \$1.00 PER YEAR; SINGLE COPIES, 10 CENTS.**

**IN CLUB WITH THE AMERICAN FLORIST, \$1.85.**

Address E. H. LIBBY, Publisher, 751 Broadway, New York.

**FRUIT CULTURE** will have the work of practical growers and experimenters in all sections.

**THE LANDSCAPE GARDENING** department is in charge of an experienced landscape gardener, one of the editors of the magazine, who will draw freely from contemporary work.

**CHARLES BERNARD,** Supt. C. T. C. C., the well-known economic writer, will minutely describe his own work in the culture of a village lot.

**VEGETABLES.** The year will be made specially noteworthy by an exhaustive series by E. S. Goff, of the New York State Experiment Station, describing all of our cultivated varieties from the light of experience at the station, and weeding out the duplicate and synonymous names without fear or favor.

**HOME GARDEN INTERESTS** will deal with plant and floral decoration of house and table, floral fashions, proper use of garden products in cooking, preserving, etc., window gardening, etc., etc., by Shirley Darc, and other noted writers.

**OUR BOOK REVIEWS** are intended as more or less complete guides to would-be purchasers of horticultural books, and are written by specialists.

**OUR MARKET REVIEWS** are credited with being useful to commercial growers, and will be continued with the same care as in the past.

**THE ILLUSTRATIONS OF THE AMERICAN GARDEN** will continue to improve in character and number. We have many interesting subjects in hand, partly the result of our prize competition. We aim to be foremost in this department.

**VERBENAS.**

Our Stock is perfectly healthy and vigorous.

Gen'l Collection, stock plants, 40 fine sorts	\$3.00; \$25.00
" " rooted cuttings 40 "	1.00; 8.00
Mammoth Set, " "	1.25; 10.00
Coleus, " " fine collection, 1,25; 10.00	
Geraniums, double and single, 3-in. pots, 4.00; 35.00	
Ampeleopsis	Veitchii, 3-in. pots, strong plants, \$5.00 to \$8.00 per 100.
	Quinquifolia, 3-in. pots, strong plants, \$8.00 per 100.

I. C. WOOD &amp; BRO., Fishkill, N. Y.

**VERBENAS**

— A SPECIALTY. —

Largest and best stock in the country now ready. Free from all disease.

— MAMMOTH SET. —

Also some of the best old sorts.

50,000 MAMMOTH WHITE.

Sale delivery guaranteed. Special rates for large orders. Add 10c. per \$1.00 worth if sent by mail.	
Per 100 Per 1,000	
From pots, " "	\$3.00 \$25.00
Transplanted on 3-in. pots, " "	1.25 10.00
Strong rooted cuttings, " "	1.00 8.00

SEND FOR SAMPLE.

W. M. DESMOND,

KEWANEE, HENRY CO., ILL.

**Mammoth Verbenas, &c.**

20 Var. Verbenas, from 3-inch pots, " "	Per 100 \$5.00
" " Geraniums, " "	2.50
25 " Coleus, including J. Goode, " "	2.50
" " Feverfew, The Gem, " "	1.50
Petunias, best set double, " "	3.00

ADOLPH HIEHLE, Parkersburg, W. Va.

100,000

**VERBENAS.**

THE CHOICEST OLD AND NEW VARIETIES.

Fine pot plants, " "	\$2.50 per 100; \$20.00 per 1,000
Rooted cuttings, " "	1.00 " 8.00

NO POST OR MILEAGE.

Packed light, and Satisfaction Guaranteed.

J. L. DILLON, Bloomsburg, Pa.

**FOR SALE.**

VERBENAS, clean and thrifty, " "	Per 100 \$2.50
Rooted Cuttings, " "	per 1,000 \$8.00; 1.00

Orders for spring delivery booked now.

JOSEPH E. BONSALL, Salem, Ohio.

**THE BEST AND CHEAPEST  
DOUBLE PETUNIA SEED**

(P. hybrida grandiflora fl. pl.)

In the market. For sale to the trade by the grower.

G. A. McTAVISH,

NORTH SAANICH, B. C., CANADA.

**GLADIOLUS.**

Mixed and Choice Named Varieties, by the dozen or thousand.

Send for prices; also for Wholesale Price List of

ORNAMENTAL NURSERY STOCK.

SAMUEL C. MOON,

Wholesale Nurseryman and Gladiolus Grower,  
MORRISVILLE, BUCKS CO., PA.**FOR WESTERN FLORISTS.**

VERBENAS, from 2½-inch pots, including Mammoth, " "	Per 100 \$2.00
GERANIUMS, best tested varieties, " "	\$2.50
5,000 ASA GRAY Geraniums, " "	2.50
5,000 GRANT " "	2.50
5,000 Rose Geraniums, will include a good proportion Dr. Livingston, " "	3.00
COLEUS, 20 best varieties, " "	2.50
FINE PREMIUM FANSIES, very strong DOUBLE PETUNIAS, " "	3.00

Large stock of most all varieties of plants. All strong and healthy. SEND FOR TRADE LIST.

Address N. S. GRIFFITH,

JACKSON CO. INDEPENDENCE, MO.  
(Independence is well located for shipping, being 8 miles east of Kansas City.)**MAMMOTH VERBENA SEED**

We have succeeded in growing SEED of this splendid strain which we now offer for the first time. We guarantee the seed to be the TRUE MAMMOTH Variety of selected colors.

Trade pkt. 50c.; ¼-oz. \$2.00; per oz. " "	\$6.00
Verbena, Dreer's Choicest Strain, pkt. 50c.; oz. " "	4.00
SMILAX. New Crop. Per ounce " "	1.50
Centaura Gymnocarpa. New Crop. 1,000 Seeds " "	.60
" Candidissima. " " "	.75

Wholesale Price List of Flower Seeds ready in December, will be mailed all applicants in the trade.

HENRY A. DREER, SEEDSMAN AND FLORIST,

PHILADELPHIA.

**NEW WHITE CARNATIONS,**

WM. SWAYNE AND L. L. LAMBORN.

The two best white carnations ever offered. EARLY, FREE AND CONTINUOUS BLOOMERS. Stock of these excellent sorts will be ready March 31, 1888. Orders booked now, and filled strictly in rotation as received, Price, \$25.00 per 100.

Send 5c. Stamp for Sample Florets.

Wholesale price list of rooted cuttings of other leading sorts ready Jan. 1st.

WILLIAM SWAYNE, Kennett Square, Pa.

**WANTED.**

200 Euphorbia Splendens; 200 Star of Bethlehem Bulbs. With size and prices.

JOHN A. SALZER, La Crosse, Wis.

**THE NEW ROSE-COLORED VIOLET**

Mme. Millet.

A first-class novelty; perfectly healthy; very profuse flowering, and sweeter than any in cultivation.

PRICE, 3-inch pots, each 40c.; doz. \$3.00; 100 \$15.00.

J. COOK, 318 CHARLES ST.,  
BALTIMORE, MD.**TOBACCO STEMS FOR FLORISTS,**

FOR SALE, packed in bales 200 to 250 lbs.

NO CHARGE for delivering to depots.

**PRICE:**

From \$3 to \$10 per ton, according to quantities.

ADDRESS

P. C. FULWEILER,  
716 Arch Street, PHILADELPHIA, PA.**STORM KING.**

The best FUCHSIA ever introduced. It will have an immense run in 1888.

GENUINE STOCK—price, \$5.00 per 100; if by mail prepaid, \$1.50 per dozen.

THE NEW SEMI-DOUBLE HELIOTROPE.

MRS. DAVID WOOD.

ITS MERITS—Novelty, lasting quality, immense size, sturdy growth, early bloomer. Price, 6 plants \$1.00 by mail, prepaid.

Address

ELLIS BROS., Keene, N. H.

**SPECIAL LIST.**

Carnations, Hinz's White, 24-inch pots, " "	Per 100 \$2.00
Geraniums, double, and sel., 100 var. 2½-in. pots, " "	3.00
Roses, American Beauty, 3-inch pots, " "	2.00
" " Camoens, Perles, Souv. d'un Ami, 3½- " "	6.00
S. de St. Pierre, The Bride, Sunset, " "	6.00
Coleus, 24 varieties, " "	3.00
Feverfew, Little Gem, " "	2.50
Hedera variegata, 2-feet, " "	4.00
10,000 Roses, as s't, 2½-inch pots, per 1,000, \$25.00; " "	3.00

A. GIDDINGS, DANVILLE ILL.

We have Fine Strong Plants of the following to offer to the trade:

Ageratum, 2½-inch, " "	Per 100 \$4.00
Geraniums, 3-inch, " "	7.00
Calla Lilies, 4-inch, " "	8.00
Rose Geraniums, 2-inch, " "	2.50
D. Alyssum, 2-inch, " "	2.00
Begonia Metallica, 2½-inch, " "	4.00
Geraniums in var., 2-inch, " "	3.00

J. W. DUDLEY &amp; SON, PARKERSBURG, W. VA.

**GERANIUMS.**

Twenty of the best varieties for bedding or market purposes, at \$5.00 per hundred, \$40 per thousand.

**VERBENAS.**

Twelve best and most distinct varieties, \$3.00 per hundred; \$25.00 per thousand. Rooted cuttings \$7.00 per thousand. Fine strong plants of Alternanthera par. major, Ampeleopsis Veitchii, Myrtus Multiflora, Myrtus Communis, and Smilax.

Prices given on application.

HOLZNAGLE &amp; NOEL,

Whitewood P. O., Mich., (near Detroit.)



SOLD BY SEEDSMEN.

100,000

Well Rooted Cuttings of Verbenas and Carnations.

VERBENAS. The very best selected from the Mammoth set, also 16 very best of the leading older varieties.

CARNATIONS. The new Lyons Whites, pure white and good winter bloomer. My own raising, very prolific and early, also about 15 of the older and best leading varieties.

Send for circular and price list and convince yourself how cheap you can buy good strong and healthy plants of the above.

FRED SCHNEIDER,

WHOLESALE FLORIST,

ATTICA, Wyoming Co., N. Y.

**NEW GRAPES:**

Niagara, Empire State, Woodruff, Red, Poughkeepsie, Diamond (No restrictions), and most other kinds, old and new, warranted No. 1 vines and true to name, at the lowest rates in America, we believe. Send for price list. J. ELLESTON,

Auburn Grape Nurseries, AUBURN, N. Y.

**GREENHOUSE HEATING.**

BY A. B. FOWLER.

Explain fully all the best systems of heating greenhouses by both hot water and low-pressure steam. Tells you the points to consider in selecting an apparatus. How to adjust same to various locations; gives the results of the latest scientific experiments. Shows how to compute the number of feet of pipe required for a given space; draft and other important matters.

It is highly commended by Mr. John Thorpe and others. Postpaid, 5c.

Sent on receipt of price. Address,  
**AMERICAN FLORIST,**  
CHICAGO.



## News Notes.

AUBURN, N. Y.—Alfred Patrick this fall built three new houses.

HAMILTON, O.—John Loder has built two new houses, 60x20 each.

LEBANON, PA.—Wynings & Dace have built a new carnation house 100x16.

WALLINGFORD, CONN.—Geo. H. Rowden succeeded Woodley & Rowden, florists, Dec. 1.

FT. WAYNE, IND.—B. L. Auger has been ill with inflammatory rheumatism for several months.

COLUMBUS, O.—John Underwood has substituted steam for hot water in heating his greenhouses.

AKRON, O.—Bert T. Wills' greenhouse was destroyed Dec. 9, by fire originating from a fumigator. Loss on stock estimated at \$2,200; insured for \$1,000.

WEST HOBOKEN, N. J.—Joseph Klein, a florist on Bergenwood road met with an accident Dec. 3 which may prove fatal. He was thrown from his wagon while driving a spirited horse, and received a fracture of the skull.

SPRINGFIELD, MASS.—The Hampden Harvest Club at a meeting in Chicopee, Dec. 13, listened to essays on fruits and flowers. Mr. J. W. Adams prepared and delivered the essay on flowers which was very practical and instructive.

PROVIDENCE.—At the monthly meeting of the R. I. Hort. society Mr. Jos. H. Bourne read a very interesting paper on the progress of horticulture during the past year. He enumerated the fruit and flowering plants introduced during the year.

LOS ANGELES, CAL.—Bristol Sisters, formerly florists of Topeka, Kan., have opened an office in the California Bank building here as real estate and investment agents. They state that they will be pleased to extend courtesies to any member of the S. A. F. who visits Los Angeles.

LOUISVILLE.—Mrs. H. Pfeiffer has bought two lots on west Jefferson street and moved her greenhouses onto them. Ed. Reimers has built two new houses, each 70x18; Rompen & Marrett one 90x10, and Geo. Schulz one 104x12. Florists here anticipate a good holiday trade.

MANATEE, FLA.—P. W. Reasoner of the Royal Palm nurseries sailed Dec. 8 for the West Indies. Mr. Reasoner has gone for plant novelties for the nurseries;

also in the position of horticultural superintendent of the Florida Sub-Tropical Exposition, to bring up exhibits for the same.

SPRINGFIELD, O.—Henry Hubert & Son have completed two new houses 50x20 each. A. R. Aldrich is at work on three new houses which will cover a space 100x80. Chas. A. Keiser has finished a large house 150x20. Of the thirteen new houses recently erected by McGregor Bros. three are 125x20 and ten are 125x12.

MILWAUKEE.—The Wisconsin State Hort. society will hold its annual meeting at Platteville, Jan. 10, 11, 12. At the meeting of the Florists' and Gardeners' Club held Dec. 7, C. B. Whitnall read a paper on the importance of insuring greenhouses against hail storms, and Wm. Edlensen one on insects that attack flowering plants. Three new members were elected.

WORCESTER, MASS.—The election of officers for the coming year at a recent meeting of the Worcester County Hort. society resulted in the reelection of the old officers as follows: President, Hon. F. H. Dewey; vice-presidents, Messrs. Stephen Salisbury, Henry L. Parker and Geo. E. Francis; secretary, Edward W. Lincoln; librarian and treasurer, Chas. E. Brooks.

DANVERS, MASS.—A handsome floral design presented to the poet, John G. Whittier on the eightieth anniversary of his birthday contained eighty Niel and Jacq. roses—one for each year of his age. A book-mark bearing the name of the poet and the closing words of the poem "My Triumph" lay across the flowers. It was sent from Boston. Many other flowers were presented to the aged poet, by admirers both near and far.

SAN FRANCISCO.—At the recent annual meeting of the State Hort. society, officers for the ensuing year were elected as follows: President, Prof. E. W. Hilgard of Berkeley; vice-president, A. T. Hatch of Suisun; secretary, E. J. Wickson of Berkeley; treasurer, R. J. Trumbull of San Francisco. Directors, T. A. Wilcox of Santa Clara, Leonard Coates of Napa, F. C. De Long of Novato, W. C. Blackwood of Haywards and D. Lubin of Sacramento.

DENVER.—The Denver *Republican* in a recent issue gives a short write-up of the florists of the city and says: "To-day there are upward of twenty individuals and firms in the specialty of floral and plant decorative and general business, and they represent a capital of more than

a quarter of a million dollars invested in grounds, buildings and stock. The *Republican* is gratified to make note of this advance in an industry which requires capital, enterprise, ability and a community to appreciate it."

PITTSBURGH.—At a recent reception the floral decorations of the parlor and dining rooms were superb. One decoration in particular attracted much attention. It consisted of a fisherman's net suspended from two heavy poles of roses and Butternut carnations. The net was composed of the same flowers with maiden-hair ferns and narcissus. From beneath the edges of the net peeped the tails of two fishes formed of flowers. A floral mirror and a floral ship were also very pretty. Murdoch executed the decorations.

INDIANAPOLIS.—The Indiana State Hort. society at its meeting Dec. 7, elected the following officers: President, Dr. Allen Furnas of Danville; secretary, C. M. Hohbs of Bridgeport; treasurer, Daniel Cox of Cartersburg; vice-presidents, W. A. Workman of Greencastle, G. W. McIntosh of Rego, Dr. Cornet of Madison, J. C. Stevens of Richmond, G. W. Grant of Pulaski, I. D. G. Nelson of Fort Wayne. Executive committee, W. H. Ragan of Greencastle, E. Y. Teas of Dunreith, Prof. J. Troop of Purdue University. One of the most interesting papers read was by W. H. Ragan of Greencastle, on "Neglected American Fruits," mentioning among them, the crab apple, the papaw, the persimmon, the huckleberry and the mulberry. Prof. Coulter of Wabash College, gave an interesting discussion of the "Fertilization of Plants."

## LILY OF THE VALLEY.

Headquarters for best forcing pips.

— FOR PRICES, ADDRESS —

AUGUST RÖLKER & SONS,

P. O. BOX 899, NEW YORK.

Mention American Florist.

## WINTER BLOOMING AZALEAS.

Winter Blooming Lilacs, &c.

GABRIEL MARC,

WOODSIDE, L. I., N. Y.

## NEW SEEDLING CARNATION

### — WHITE GEM. —

The finest Pure White Carnation ever offered the trade. Early, continuous and free bloomer, never bursting its calyx.

*Awarded a First-Class Certificate of Merit by the Mass. Hort. Society, Nov. 27th, 1887, for Excellence.*

Strong plants, well-rooted, ready about March 15th, '88, at \$15.00 per hundred; \$2.00 per dozen.

ORDERS BOOKED NOW, AND FILLED IN STRICT ROTATION.

Circular giving full information ready now. SEND FOR ONE.

GEO. E. BUXTON,  
Nashua, N. H.

PATTEN & CO.,  
Lowell, Mass.





## Palms for Room Decoration.

For this purpose the plants should be grown as hard in texture as possible, confining them to comparatively small pots and feeding with liquid manure, soot water imparting a good deep green color to the leaves. The following succeed well in a greenhouse temperature, but we grow our young plants in a cool stove, so as to get them to a decorative size in as short a time as possible, and they do not suffer when taken into a warm room, but those for halls should be well hardened before removal into the cooler quarters. *Chamærops excelsa*, *Corypha australis*, *Phoenix reclinata*, *P. tenuis*, *Rhapis flabelliformis*, *Seaforthia elegans*, *Sabal Blackburniana*, *Pritchardia filamentosa*, and *Areca rubra*. Cool stove kinds are *Cocos Weddelliana*, *Demonorops palenbanicus*, *Areca lutescens*, *Kentia australis*, and *Latania borbonica*; the latter is very useful for warm rooms. The chief cause of the foliage becoming withered at the tips is from their being grown in a warm house, moist, and close, which renders them soft, so that they cannot bear the dry air of rooms.—*Journal of Horticulture*.

FREMONT, NEB.—W. J. Biggar a vegetable gardener here, has this season built several additional greenhouses and branched out into floriculture. Weather is very cold here; mercury has been down to 22° below zero already this winter.

## ONLY POTTERY MAKING A SPECIALTY OF

FLOWER POTS  
FOR FLORISTS.

THE WHILLDIN POTTERY CO.,  
713 & 715 WHARTON ST.,  
PHILADELPHIA.

## SYRACUSE POTTERY.

Thumbs.....\$2.54 No. 3 Rose.....\$3.70 1 3/4-inch.....\$4.29  
2 1/4-inch.....\$4.86 No. 2 Rose.....\$4.00 1 1/2-inch.....\$5.31  
2 3/4-inch.....\$5.87 No. 1 Rose.....\$4.33 1 1/4-inch.....\$6.83  
3 1/4-inch.....\$7.78 Special 3 1/4-inch.....\$6.15 1 1/2-inch.....\$13.75

Above prices per 1,000, all packed and delivered free on board cars. We ship all over U. S. Free samples with first crate. Order a trial crate. Add 10c. if you send check. Write for freight rates and list of prices at which we pack to order assorted sizes in a crate. We have very low freight rates. The rate to Cleveland is 10c., Toledo or Detroit 10c., Chicago 20c., St. Louis 25c., Memphis 30c. Crates weigh 300 lbs. State the amount and sizes you need. At the very low prices above quoted we sell only in

## READY PACKED CRATES

Shipped at buyer's risk and freight, cash with order.

PRICES BY THE CRATE: 3,150 Thumbs, \$8.00;  
2,625 2 1/4-inch, \$8.00; 1,900 No. 3 Rose, \$7.00;  
1,775 2 3/4-inch, \$7.25; 1,600 No. 2 Rose, \$6.40;  
1,150 3 1/4-inch, \$6.50; 1,500 No. 1 Rose, \$6.50;  
875 3 3/4-inch, \$5.50; 1,300 special 3 1/4-inch, \$6.00;  
600 4-inch, \$4.75; 320 5-inch, \$4.40;  
320 4 1/2-inch, \$4.40; 160 6-inch, \$5.40.

J. N. PERKINS, Manager, Syracuse, N. Y.

## HAND TURNED POTS

From HILFINGER BROS.' POTTERY.

FORT EDWARD, N. Y.

PRICES PER HUNDRED:

2 1/4-in. 40c., 2 3/4-in. 50c., 3 1/4-in. 55c., 4 1/4-in. 55c., 5 1/4-in. \$1.00,  
6 1/4-in. \$2.20, 7 1/4-in. \$4.00, 8 1/4-in. \$6.00, 9 1/4-in. \$8.50, 10 1/4-in. \$11.50,  
12 1/4-in. \$22.50, 14 1/4-in. \$30.00. (Cylinders for Cut Flowers,  
10 x 1 1/2-in., 10 x 3 1/2-in. per doz.) We pack in cases which  
are very strong. No charge for packing. Our pots  
are well burnt and strong. TERMS CASH. Address

HILFINGER BROS., Fort Edward, N. Y.

## HALES' MOLE TRAP

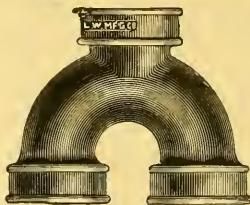
For destroying ground moles in lawns, parks, gardens and cemeteries. The only PERFECT mole trap in existence. Guaranteed to catch moles where all other traps fail. Sold by seedmen, Agricultural Implement and Hardware dealers, or sent by express on receipt of \$2.00 by H. W. HALES, RIDGEWOOD, N. J.



FOR THE TRADE.  
**FLORIST WIRE DESIGNS.**  
JAS. GRIFFITH.  
THE : PIONEER : MANUFACTURER : IN : THE : WEST,  
305 Main Street. CINCINNATI, OHIO.  
SEND FOR WHOLESALE PRICE LIST.



## Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

## GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

Mention American Florist.

L. Wolff Mfg. Co., 93 to 111 W. Lake St. CHICAGO

Mention American Florist.

## GURNEY'S NEW HOT WATER HEATER.

THE CHEAPEST AND BEST FOR  
Greenhouses, Conservatories and  
DWELLING HOUSES.

THE GURNEY HEATERS present more water surface to the direct action of the fire than any others (known to us) in use. They are the easiest to keep clean, and with the attention almost any kind of fuel may be used.

EASILY REGULATED.  
SIMPLE AND EFFICIENT  
SAFE AND ECONOMICAL.

Manufactured by the

GURNEY HOT WATER HEATER CO.,

237 FRANKLIN STREET, BOSTON, MASS.

JOHN A. FISH, Managing Director.

SEND FOR CATALOGUE AND PRICE LIST.

SELLING AGENCIES.—M. H. Johnson, 140 Central Street, New York. Rice & Whitacre Manfg. Co., 42 and 44 W. Monroe Street, Chicago (West and Southwest). T. R. Chase, 31 Edmund Place, Detroit, Mich. (for Michigan and Ohio). Wm. Gardiner & Co., Portland, Oregon.

Mention American Florist.



## THE AMERICAN FLORIST COMPANY'S

## : : DIRECTORY : :

OF

## FLORISTS, NURSERYMEN AND SEEDSMEN

OF THE

UNITED STATES AND CANADA.

1887.

PRICE ONE DOLLAR.

The most complete and accurate list yet published. The key designates the particular branch of the trade each is engaged in. The street and number of those living in cities will insure the delivery of tons of catalogues which have hitherto remained dead in the office to which they were addressed. At this low price every one in the trade can afford to have a copy for reference. Address

AMERICAN FLORIST CO.

54 LA SALLE ST., CHICAGO.

**LEAVENWORTH & BURR,**  
B. I. DETROIT, MICH.



## Index to Advertisers.

Advertising Rates, etc.	235
Allen, C. K.	237
Allen, S. L., & Co.	237
Allen, W. S.	235
American Garden	240
Barnes, M. & Vent.	230
Bayersdorfer, M. M. & Co.	237
Benard, E. Jr.	233
Beniz, Albert	241
Berger, H. H., & Co.	243
Blanc, A.	237
Bonsall, Jos. E.	233
Boyson, Jas. L.	243
Brackenridge & Co.	243
Burpee, W. A., & Co.	237
Buxton, Geo. E.	242
Carmody, J. D.	246
Cook, J. J.	241
Critchell, B. P. & Co.	233
Crosseup & West, Rog.	237
Carrie Bros.	235
Desmond, Wm.	241
De Vee, J. A.	239
Devine, Peter	245
Diez, John L., & Co.	243
Dillon, J. L.	235
Dreer, H. A.	237
Dudley, J. W. & Son.	241
Elliott, J.	241
Elliott, B. A., Co.	239
Ellis Bros.	241
Exeter Mach. Wks.	246
Fassett, F. B. & Bro.	243
Ferry, D. M. & Co.	237
Fink & Co.	243
Fulweiler, P. C.	241
Giddings, A.	241
Goldman, M.	237
Gregory, Jas. J. H.	237
Griffith, Jas.	241
Griffith, N. S.	241
Growth, Henry J.	240
Gurney Heater Co.	244
Hales, H. W.	244
Hallock, V. H. & Son.	239
Hammond & Tucker	235
Hammond's Slug Shot	241
Herman & Son.	237
Harold, Thos. G.	243
Herr, Albert M.	241
Hieble, Ad.	241
Hickey, Henry G.	243
Hilfinger Bros.	241
Hill & Co.	235
Hippard, E.	239
Hitchings & Co.	245
Holmgren & Noel	243
Hooker, H. M.	246
Hurff, Freeman	237
Ives, J. H.	246
Jewett, Z. K.	243
Joesten, C. H.	239
Karr, Geo. A.	237
Kennett Bros.	235
King, James	239
Kriek, W. C.	240
La Roche & Sturges	235
Leaveworth & Burr	235
Livingston's Sons	237
McAlister, F. C.	239
McCarthy, N. F. & Co.	243
McFarland, J. Horace	241
McTavish, C. A.	241
Maish, M.	233
Marc, Gabriel	233
Matthews, Wm.	243
Meecham, Wm.	243
Melcher, J. H.	243
Michell Plant & Seed Co.	243
Miller, Geo. W.	245
Moore, Remie	240
Moon, Samuel C.	241
Moore, Henry	243
Mullen, Geo.	235
Murphy, C. H.	238
Myers & Co.	246
Nanz & Neuman	238
Nourse, B. B. & Co.	237
Patten & Co.	242
Penock, Chas. E.	239
Perkins, J. N.	244
Plenty, Josephus	245
Prie, Charles S.	245
Rairow, W. W. & Co.	247
Reich, A. & Co.	245
Rochers, Theo.	235
Roemer, Frederick	243
Roeder, A. & Sons	242
Saizer, John A.	237
Schneider, Fred.	241
Schultze, Bros.	243
Schulz, Jacob	243
Scollay, John A.	246
Seger, Bros.	239
Sheridan, W. F.	245
Sibley, Hiram, & Co.	237
Siebrecht & Wadley	243
Siekman, J.	239
Simmons, J.	243
Sitons, Waite	243
Spooner, Wm. H.	243
Starr, Chas. F.	243
Sudens, N.	243
Stewart, Wm. J.	245
Stimson, E. & Co.	246
Strauss, C. & Co.	245
Studer, N.	241
Swayze, Wm. J. & Co.	243
Thompson, G. & Sons	243
Tucker, A. C.	243
Vander Schuer, R. & Son.	239
Vaughan, J.	235
Weathered, Thos. W.	246
Weich Bros.	235
Whitlie Pottery Co.	241
Wilks, S. Mfg. Co.	246
Wolf, L. Mfg. Co.	244
Wood, L. C. & Bro.	241
Young, Thos. J. & Co.	235
Zirgibel, D.	243



Sectional View.

## IMPROVED BOILERS

FOR HEATING

## GREENHOUSES

GRAPERIES, POULTRY-HOUSES, ETC.

ALSO FOR HEATING

WITH HOT WATER UNDER PRESSURE.

VENTILATING APPARATUS

For Raising Sashes in Greenhouses.

GALVANIZED SCREW EYES

And Wire for Trellis Work.

Send for Catalogue.

Thos. W. Weathered,  
46 & 48 MARION ST., N. Y.

## Scollay's Valvular Plant Sprinkler.

ALSO THE IMPROVED PUTTY BULB,

FOR GLAZING GREENHOUSES, ETC.

None sold at retail. Buy from your Seedsman.



## PATENT HOT WATER BOILERS.

For Greenhouses, Poultry Houses, Etc., Etc.

JOHN A. SCOLLAY,

74 and 76 Myrtle Ave., Brooklyn, N. Y.

## Improved Hot Water Boilers

For Heating

Greenhouses, Graperies,

CONSERVATORIES, ETC.

ALSO

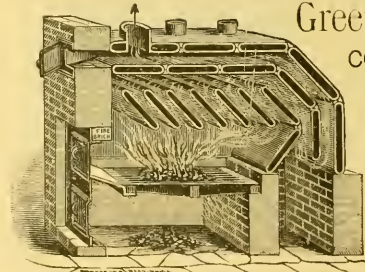
Cast Iron Pipe, Fittings, Valves and  
all Material for Heating by  
Hot Water.

Send for Catalogue.

MYERS &amp; CO.

1173 So. 9th St.,

PHILADELPHIA.



AUGUSTA, ME.—At the funeral of Gov. Bodwell, Dec. 19, the floral pieces were numerous and several very elaborate; many were of the choicest flowers.

## SOMETHING NEW

— IN —

## Heating Apparatus

— FOR —

## GREENHOUSES.

Send for Illustrated Catalogue.

J. D. CARMODY,

EVANSVILLE, IND.

## Ives' Putty Machine.

Patented Jan. 8, 1887.

The best device ever invented for laying putty. With this you can make old leaky sash perfectly tight, without removing the glass. It will do the work of five men in bedding glass.

Send by Express on receipt of price, \$3.00.

J. H. IVES, DANBURY, CONN.

## PIPE AND FITTINGS FURNISHED

— TO —

PLANS AND SPECIFICATIONS.

Contracts solicited for

## HEATING GREENHOUSES.

Most improved plans.

ALL WORK GUARANTEED.

Best Prices furnished on application.

E. A. STIMSON &amp; CO.,

No. 22 and 24 Sears Street,

DAYTON, OHIO.

## GREENHOUSE HEATING

BY STEAM, BY HOT WATER, BY COMBINATION STEAM AND WATER.

## EXETER MACHINE WORKS,

19 FEDERAL ST., BOSTON, MASS.

WORKS—EXETER, N. H.

THE CELEBRATED  
WILKS WATER HEATER!

For Heating

GREENHOUSES,

DWELLINGS,

POULTRY HOUSES,

STORES, BATH TUBS.

ETC., ETC.

Send for Price List.



S. Wilks Mfg. Co.,

Cor. Monroe &amp; Clinton Sts., Chicago



ALL SIZES OF SINGLE AND DOUBLE THICK

## GLASS FOR GREENHOUSES.

ALL GLAZIERS' SUPPLIES.

Write for Latest Prices.

# THE AMERICAN FLORIST



America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. III.

CHICAGO AND NEW YORK, JANUARY 15, 1888.

No. 59.

## THE AMERICAN FLORIST

Copyright, 1887, by American Florist Company.  
Entered as Second-class Mail matter.

Published on the 1st and 15th of each month by  
THE AMERICAN FLORIST COMPANY.

GENERAL OFFICES, 54 La Salle Street, Chicago.

EASTERN OFFICE,  
Room 81, Vanderbilt Building, New York.

All communications should be addressed to the  
general office at Chicago.

SOCIETY OF AMERICAN FLORISTS.—R. G. HILL, Richmond, Ind., president; John N. May, Summit, N. J., vice-president; M. A. Hunt, Terre Haute, Ind., treasurer; Wm. J. Stewart, 67 Bromfield street, Boston, Mass., secretary. The fourth annual meeting at New York, Aug. 17, 18, 19, 1888.

THE DATE at which your subscription expires is noted on the printed address label, and will be found on each number you receive. Those of our subscribers who write us asking when their subscription expires, can save themselves this unnecessary trouble by examining the label.

### Holly, Green and Mistletoe.

The sale of holly undoubtedly increases yearly and this season has been no exception to the rule that it is always scarce at the best time for selling. The holly seems to produce a good crop of berries but once in two years, and hence a good supply is not to be had from the same section each year. The foliage this season on most stock has been poor. With handsome leaves and fine berries no doubt sales would have been one-fourth larger.

The west, the largest source of lycopodium, has sent out probably a less amount than usual though generally of better quality. Early and often repeated snow storms delayed and prevented the gathering of the usual amount. Some of the wreathing made in anticipation of great scarcity, was found at the last moment to be an overproduction and prices dropped about fifty per cent. Dec. 22 to 24.

Mistletoe continues to be in demand and continues to be as unsatisfactory an article as ever. It seems impossible to depend on fine stock from over the sea; but since a small spray answers the purpose of the retail customer, those dealers who know the impossibility of getting the stock in first-class shape, can always dispose of it with a profit where any demand exists. It is evidently the idea that a few twigs with two or three leaves and berries fill the bill.

Pines and palms are likely to come into more general use, and are already much called for in the eastern cities. The southern pine sent for this use is a very graceful parlor decoration and certain to meet with a large demand wherever shown.

## THE HOLIDAY TRADE

PORTLAND, OREGON.—Trade was duller than ever before.

EVANSVILLE, IND.—About the same as last year. Loose flowers the principal call, with an increase in that for holly. Roses in best demand, Roman hyacinths next; prices about same as last year.

PROVIDENCE, R. I.—Trade and prices about the same as last year. Call more for loose flowers and less for baskets. No house decorations. After roses, carnations and violets were in best request.

WILMINGTON, DEL.—Trade larger, principal demand being for loose flowers and plants. After roses, carnations were in best demand. Prices same as last year. Many plants were used in church decorations.

WASHINGTON.—Trade not as large as last year. Calls were mostly for loose flowers, house decorations and plants. After roses, carnations were in best demand. Prices about the same as last year.

HAMILTON, ONT.—Trade no larger, principally house decorations and loose flowers. After roses, carnations were in best demand. Trade in general much quieter than last season, and prices the same.

RICHMOND, VA.—Christmas trade was larger, New Year's smaller. Two-thirds cut flowers; also a good demand for potted hyacinths and violets. Roses and violets in best demand and prices about the same as last year.

TOLEDO, O.—Holiday trade far better than last year, due to the fact that many weddings and parties occurred during the week. The call was principally for loose flowers, but few baskets were sold. New Year's trade was very weak.

LOS ANGELES, CAL.—Trade 50 per cent. larger and about equally distributed between loose flowers, baskets and decorations. Roses were in best demand, first, last and all the time. No increased demand for any particular stock was noted.

NEW HAVEN, CONN.—The demand for cut flowers and plants at the holidays was about the same as last year, with the exception of Roman hyacinths, which were more generally called for. Prices same as last year.

TERRE HAUTE, IND.—Trade about equal to last year, loose flowers, baskets and bouquets being called for in about equal proportions. Prices were about the same as last year, except selected roses, which brought a little better price. After

roses, the flowers most in demand were tulips, hyacinths and carnations.

BROOKLYN, N. Y.—Trade for Christmas was much larger than has been the case the last few years. After roses, carnations and lilies were in best demand. The cut flower trade generally has not been very brisk this winter, most florists complaining.

ST. LOUIS.—Holiday trade about equal to last year, and prices ruled about the same. Everything sold, the calls for loose flowers, baskets and designs and house decorations being about equal. No increased demand for any particular stock was noted.

CLEVELAND.—Trade larger and prices a little higher than last season. Our holiday trade has shown an increase of about 25 per cent. each year for a number of years. After roses, the best call was for carnations, that for red carnations showing quite an increase.

HARRISBURG, PA.—The cut flower trade was very good for Christmas, but nothing for New Year's. The demand was larger and prices better than last year, that for loose flowers in boxes being far in excess of that for bouquets and baskets; carnations ranked next to roses. The demand for holly was fair, but prices too low.

KANSAS CITY, MO.—Trade larger; mostly loose flowers, few baskets called for. Green sold well and there was some call for holly. Romans and narcissus sold well when roses could not be had at a fair figure; \$1.50 a dozen is about all we can get for roses, though good buds sold for \$3 a dozen in limited quantities.

TORONTO, ONT.—There was an increase over that of last season. The largest demand was for loose flowers, followed by designs, baskets and plants in the order named. After roses, the best call was for Roman hyacinths, tulips and narcissus. There was a scarcity of flowers, owing to the dark weather which preceded the holidays.

OAKLAND, CAL.—Trade larger than last year. More demand for loose flowers and less for baskets and designs. After roses, chrysanthemums and hyacinths were in best demand. There was an increased demand for showy plants in bloom, also for trees and evergreen wreaths. Less house decorating by professional hands.

WORCESTER, MASS.—Trade a little larger than last year, one-half the calls being for loose flowers, one-quarter for bouquets and baskets, and one-quarter for church decorations. Next to roses, red tulips, red carnations and violets were most in demand. Prices about the same as last season. Some fine orchids was the only novelty offered.



GRAND RAPIDS, MICH.—Trade larger; loose flowers were in most demand. Little or no call for house decorations or plants. There was an increased demand for roses, and after these Romans, violets and lily of the valley received the most call. Retail prices same as last year; wholesale prices higher.

SAVANNAH, GA.—Trade larger than any previous year. Calls were principally for bouquets and baskets. After roses, the flower most in demand was the camellia, but owing to the scarcity of roses any flower sold readily at good prices. Prices were about the same as last season, but a better price was realized for filled baskets, etc.

NEW ORLEANS.—Trade fully one-half larger, loose flowers taking the lead. After roses, the preferred calls were for hyacinths. On account of the very favorable weather for out-door stock, the prices were very moderate, far below last year—say one-third less. There was a good supply of out-door grown roses. Imported stock of lily of the valley and tulips sold freely at cost price only.

PORTLAND, ME.—Trade about one-fourth larger than last year. Call principally for loose flowers and hand bouquets. After roses, carnations, hyacinths and violets were in best demand. Prices were about the same as last year. Tea roses, \$1; Niels, La France, Mermetts, Perles and Souvenirs, \$3; carnations, long stems, 50 cents; hyacinths, \$1 a dozen, and violets, \$2 a hundred.

ROCHESTER, N. Y.—Trade larger, mostly cut flowers. After roses, violets and carnations were most in demand. Wholesale prices a little lower on some flowers than last year. Retail prices about the same as last year. The necessary increase in price owing to wholesalers' demands keeps a good many people (who are in the habit of buying flowers and who would stand a fair increase) from buying.

MONTREAL.—Christmas trade about the same as last year, while that of New Year's was rather below the average. Flowers generally were scarce, the only thing to be had in quantity being Roman hyacinths. A few freesias were in the market. Very little plant decoration, owing probably to the intense cold. Loose flowers and baskets were in chief demand. Prices about the same as last year.

SAN FRANCISCO.—Trade about equal to last year. The demand was mostly for baskets. Outside of roses and orchids, chrysanthemums were most in demand; there was an increased demand for roses and chrysanthemums over last year. Outdoor flowers extremely scarce, owing to the very severe frosts we are having of late. I have had some very fine blooms of Puritan for holidays, and a great demand for P. Gontiers.

LEAVENWORTH, KAN.—Trade larger than last year. More call for loose flowers. Baskets and designs were but little called for. Fair demand for house decorations. Roses sold at from \$1.50 to \$2.50, and carnations 30 to 50 cents a dozen; other flowers about the same as last year. After roses, carnations were in best demand. Wreathing was in good demand, but holly and mistletoe were but little called for.

SYRACUSE, N. Y.—Trade was not quite equal to last year. The call was almost exclusively for cut flowers, very little being done in baskets, designs or house

decorations. Roses and carnations were in chief demand; tulips and Roman hyacinths were a drug. Holly and other greens sold well. Mistletoe was but little sold, owing to the wretched condition in which it was received. Prices were generally lower, with the exception of roses, which were somewhat scarce.

DAVENPORT, IA.—Trade slightly larger than last year, caused by the commercial travelers' reunion, which occurred Dec. 26-28. Prices were about 10 per cent. higher than last year, owing to short supply. The reunion above mentioned made a lively call for flowers, and all the florists were busy. At the various banquets some of the best decorations ever seen here were executed by florists F. L. Bills, W. H. Crow and J. T. Temple.

ST. JOSEPH, MO.—The volume of trade was decidedly larger than last year; the supply was one-third larger, and the demand greatly exceeded the supply. The calls for loose flowers over baskets and designs was about three to one. After roses, Roman hyacinths were in best request. Everything went. Prices about the same as last year. House decoration and plants not so good as last year, which will be overbalanced by demand the coming week.

COLUMBUS, O.—The cut flower trade at the holidays has steadily increased for several years past, and this year was 50 per cent. greater than last, but very few baskets and designs were used Christmas. Besides the flowers for wearing, the orders filled were entirely of loose flowers put up tastefully in boxes. The largest sales were of roses; hyacinths, valley, narcissus and carnations following in the order named. Prices were fully up to last year's and larger individual sales effected.

BUFFALO.—Trade fully as large, probably larger than last year. Most all loose flowers; some baskets and decorations; plants sold fairly; designs in the minority. Good roses carried the day. Grace Wilder carnation sold well, also violets as usual; tulips too poor to be a factor; Romans and narcissus sold pretty well. After roses, best call was for choice flowers; bouvardias, stevias and such classes not selling as well as in other years. Smilax more plentiful than called for. Good holly scarce.

PITTSBURG.—As far as we can learn, all the florists did an increased business over that of last year. There was a large call for loose flowers and fine baskets. The sales of Roman hyacinths, narcissus and carnations were immense, in addition to that of roses, at somewhat lower prices than those of former years. The very free forcing of bulbs for Christmas flowers will have a tendency to lower the prices of roses, as people are coming to select bulbous bloom where such high prices are asked for roses. Freesias and Harrisii lilies were offered and sold well.

DETROIT.—Christmas trade was larger than ever before. The greatest call was for boxes of mixed flowers and baskets, the loose flowers taking the lead. After roses, the greatest call was for violets. Not as many parties as usual. Holly, wreathing and mistletoe were used more than ever before. The regular New Year's call was light. The home supply was very good, though more could have been sold if the very high prices asked by wholesalers had not prevented us from buying. We could not retail roses for any better prices than the wholesale ones quoted from New York and Boston.

SALT LAKE CITY, UTAH.—Trade was about the same as last year. There was more call for loose flowers, baskets and designs, and one-third less demand for plants and house decorations. The call for baskets and designs of dried flowers and pampas plumes has decreased remarkably. Holly and green sold better than last year. No novelties were offered. In cut flowers the principal demand was for roses; chrysanthemums, Roman hyacinths, callas and carnations followed in the order named.

MILWAUKEE.—The volume of trade was larger; the demand for different stock was in about the following proportions: Loose flowers, 50 per cent.; baskets and designs, 30 per cent.; house decorations, 20 per cent. After roses, carnations and Roman hyacinths were in most demand. There was an increased call for holly and roses. Prices ruled a trifle higher than last year; no novelties worth mentioning were noted. One point noticed was that first-class flowers only were wanted, regardless of price, while poor flowers were not wanted at any price.

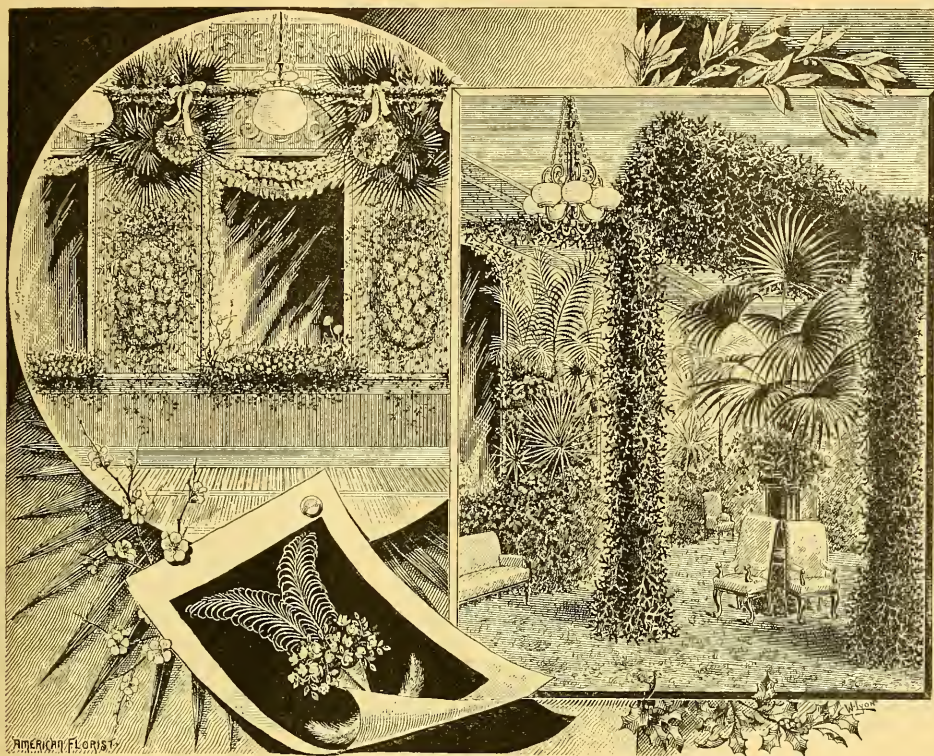
SPRINGFIELD, MASS.—The holiday trade in this city was very satisfactory, our florists having an unusual demand for cut flowers of all kinds. The larger part of the trade was in loose flowers, although large quantities of evergreens, holly and mistletoe were used. Very few plants were used for decorating compared with other years. Aside from roses, carnations seemed to be the favorite flowers, and in the choicer varieties such as Grace Wilder, Anna Webb, Buttercup and others, the supply fell far short of the demand. Holiday prices were about the same as last year.

INDIANAPOLIS.—Trade showed an increase over former years except for New Year's, the latter having decreased considerably. At Christmas the demand was for baskets, bouquets and other favors, while the sale of lycopodium, holly and laurel was enormous. House decorations were few compared with former years, and very few set designs were ordered. Roses led in demand, followed by carnations, Romans and lily of the valley. An unusual demand for red roses was noted, and they were scarce and high-priced. Prices were lower than last year. Mistletoe was considerably called for, but supply was short, though of good quality.

LOUISVILLE, KY.—Business was at least 25 per cent. better than last season—some florists say double; demand larger than the supply. Sales about 75 per cent. loose flowers and 25 per cent. baskets. After roses, hyacinths, narcissus, violets and carnations were in best demand. Increased demand for violets and carnations. More house and church decorating was done. We had a lot of sweet jonquils which sold well; they force easily and sell well on account of color and fragrance. Prices about same as last year, except violets, which brought 50 per cent. more on account of their scarcity. Taken altogether, we had an excellent trade—better than expected.

DES MOINES, IA.—Volume of trade somewhat larger than last year. Boxes of loose flowers were in best demand; roses, carnations and white Romans being preferred in the order named, the call for the last named being considerably in excess of that for last year, though the supply exceeded the demand. White narcissus were also in better demand. Prices held about the same as





BALL DECORATION AT DELMONICO'S, NEW YORK, NEW YEAR'S, ARRANGED BY KLUNDER. (SEE PAGE 251)

last year. When the price of roses is placed at over \$3 a dozen, sales are small. Fancy roses brought \$3 a dozen, long-stemmed carnations 60 to 70 cents, Romans and narcissus \$1.20 a dozen. Green was in good demand as usual. But little decorating was done New Year's. Sales mostly of flowers for personal wear.

ST. PAUL.—Trade showed a marked increase in all branches, especially in the call for holly and other green. The churches decorated more generally than in former years. Flowers were not of best quality, owing to dark weather, but all were sold and more could have been disposed of. Boxes of loose cut flowers were the leading call, these taking the place of designs and baskets formerly ordered. The only novelty noted was *Pinus elegans*, extra fine branches of which were offered at fair prices, but they did not sell as readily as was expected. They are a splendid addition to our stock of decorative greens. The demand for colored flowers was unusually positive, many people slighting good Perles for poor Bennetts and Counters. Poinsettias did not seem "to take" as well as usual. The florists are all well satisfied with the Christmas trade.

CHICAGO.—Most florists report the holiday business as somewhat larger than last year. There was a little better sup-

ply of flowers, noticeably roses, and all were sold at good prices, though on some fine roses prices did not reach as high a figure as last year. The call was almost entirely for boxes of loose flowers. The sales of green and holly were very large, one retail florist alone disposing of thirty-five cases. A large number of Christmas bells filled with crimson immortelles also found ready sale. There was an immense supply of Roman hyacinths, and they sold well. Owing to the improvement in the supply, orders were better filled, and all the florists are well satisfied with the Christmas trade of '87. New Year's sales were of little consequence. The fact of Christmas being on Sunday proved an advantage rather than otherwise, as it resulted in considerably lengthening the period of heavy buying instead of the trade coming entirely in one or two days.

CINCINNATI.—Trade was far in excess of that of a year ago—so say most of the florists here. One says that business was better the week before Christmas than at any similar time in ten years before. The fact that Christmas came on Sunday explains it in part, for people had six whole days for preparation. Prices were not quite as good as those commanded in '86; one or two florists were caught with a large stock, and prices were cut in consequence. For Christmas the calls were

for loose flowers almost exclusively, that for designs being confined to a few churches, which also used the few plants called for. What little house decoration there was, was done by the people themselves, who bought the material and arranged it to suit their own taste. After roses, the most numerous demands were for violets and lily of the valley. Holly was plentiful and was much more largely used than ever before. First-class mistletoe was scarce. Huntsman surprised people by offering *chrysanthemums* New Year's.

DENVER, COL.—Trade was fully 50 per cent. larger than last year, and with some it was more than double. As usual, there was not enough stock to near supply the demand. The florists here mostly refuse to sell loose flowers, and insist on customers taking some filled design. The call is fully one-half for loose flowers, especially for choice boxes of roses. Next to roses, carnations, Romans, marguerites, forget-me-nots and violets were called for in about the order named. The demand for novelties is not large enough here yet to warrant any great outlay for bringing them out. There has been an unusual number of parties here this winter and the demand for fine decorative plants is increasing very perceptibly. There also begins to be some call for orchids in the choicest table decora-



tions, and one of our leading florists contemplates putting in a stock of these another season. Have had considerable cold weather, but no extremes yet; plenty of sunshine. Prosperity generally is visiting the florist as well as all classes in this growing city and state. Our florists are wide awake and keep increasing their capacity in order to keep pace with the demand, and they are succeeding as well as in most localities. The New Year's trade amounts to very little. The demand for green and holly has increased very much; large quantities were sold.

ALBANY, N. Y.—There does not appear to be any marked increase in this year's holiday trade over that of last year in our city. This is probably owing to a more limited supply of flowers, and consequently higher prices were asked and obtained for all choice varieties. Formerly at this time it was impossible to buy stock from the commission dealers and expect to obtain satisfactory retail prices from buyers. An improvement in this respect, however, is manifest, and there are some people who can appreciate the value of fine flowers and the trouble it is to obtain them during the cold, dark days of winter. Very little trade, if any, is done in the decoration of private houses with plants; a few are bought by individuals, and some of the churches use a limited number with good effect. For holly, on the contrary, each year finds a more extensive demand, and it is rare to find any dealer with a spray unsold on Christmas evening. There is no increase in the demand for baskets of flowers. The time seems to be drawing near when these, like bouquets, will be almost uncalled for. The increasing desire for long-stemmed cut flowers is a favorable sign, showing that the public understand that the beauty of a flower is lost when a wire is run through its tender petals, stripped of its foliage and bound to a toothpick. For boxes of flowers the demand has been in excess of the supply. Roses, carnations, blue violets, mignonette and lily of the valley are, in the order named, the flowers most sought after. No one seems to care for white violets.

BALTIMORE florists are unanimous in pronouncing the holiday trade this season the best they have known for many years. There was a perceptible falling off in the matter of floral designs and house decoration, but the deficiency in this respect was amply made up by the very increased demand for loose flowers. Roses were of course the staple article, the supply being quite equal to the demand, except as to American Beauty, Puritans and Gontiers. Beauties were very popular and brought good prices; Gontiers were also much in demand, but the supply was somewhat limited. Several of our florists have grown quite enthusiastic over this rose, having discovered during the holidays that it is a good "keeping" variety. Next to roses, violets appeared to be most popular; they were not very abundant, however, and those dealers who had a good supply on hand found them to be profitable stock; of other flowers, such as mignonette, narcissus, carnations, lily of the valley, etc., the supply was good and no flowers were lost for lack of demand. Romans were almost a "glut," and consequently cheap; some few orchids were shown, but the demand for them was not brisk, Baltimoreans having not yet been educated up to dealing very heavily in these expensive flowers. In the sale of plants there was a very decided increase over former years; indeed,

the holiday trade here may be said to have been chiefly confined to plants of a decorative character and loose flowers. Prices as a general thing were better than last year, and as one florist remarked to me: "Purchasers paid the prices asked with less growling than in previous years."

PHILADELPHIA.—Volume of trade decidedly in excess of last season, the sales of loose flowers constituting about half of the trade. Orders for house decorations are becoming fewer every year, the people buying the material and doing their decorating themselves. The calls for baskets and bouquets were about equally divided. Church decorations are more general than in previous years, and more set designs are used in them. Long stem carnations and bouvardias were in brisk demand, being freely purchased by people who could not afford to buy the more expensive rose; this demand was considerably in excess of that of last season; in consequence the wholesale price of these flowers ranged from 50 cents to \$1 more per hundred than last year. One feature worth mentioning was the fact that more buyers would ask for the newer roses by name and not tersely "pink," "yellow" or "red roses," indicating that the popular interest in and knowledge of flowers is on the increase. If orchids could be produced and sold as cheaply as good roses, they would soon become a popular flower, as the inquiry for orchid blooms is steadily increasing. The market was glutted with Roman hyacinths, and is so still, partly due to the inferior quality. English mistletoe was sold in large quantities. Prices of flowers were generally lower than last season, being unusually low up to within three days of Christmas, but advanced to one-third more than last year from the 21st to the 24th, inclusive, then dropping as suddenly on the 26th. For New Year's, prices were low compared with other seasons. The prospect for a brisk business until Lent is good.

#### Philadelphia.

Christmas trade was better than ever before; but that of New Year's showed a falling off, which has been the case for some years past. Designs in some establishments were in greater demand than loose flowers, while the reverse was the case in others. Next to roses, carnations were the most used and called for, Grace Wilder still in the lead at the best prices. More orchids were used than usual, especially *Cypripedium* insignis. There were more of this Lady slipper to be had this year, though they have always sold well at fair figures for some years past. American Beauty roses were much called for; one dealer offering \$15 per dozen for first-class flowers; and one case is reported where \$18 per dozen was offered. White lilacs and *Jacqueminiot* roses were amongst the rarities.

Pennock Bros. had some of the Devereaux Art Pottery Co.'s ware to offer for holiday presents, which are useful in which to stand pot plants for home adornment, and beautiful to look upon. Evans & Battles used ribbon five or six inches wide in their best work. This enterprising firm also had a variety of designs, the outer parts of which are of cherry bark profusely decorated by nature with lichens. Heron & Nisbet had to stop taking orders as early as 9 o'clock on Saturday A. M. Joseph Kift & Son could better cope with their increasing trade in their new and better appointed

store. Wm. N. Crawford is more than satisfied with his trade. Graham & Grigg had their hands full, with their trained corps of assistants in moving orders. Craig & Bro. report that having three days in which to fill their orders, was of great assistance to them. Robert Crawford says that he realized quite double on his holiday orders than usual. Immortelle designs sold well because the weather admitted of people visiting cemeteries without discomfort.

Holly, laurel and mistletoe were used in homes more generally than usual. Pink colors seemed to be more called for in flowers. Pot plants sold well. Chinese primroses were scarce, owing to one of the principal growers having a mishap with his stock. A few plants of *Erica hyemalis* were to be seen, and very pretty they are too. E. L.

#### New York.

Business at Christmas throughout the city was excellent, particularly with those dealers who sold exceptionally fine flowers. In fashionable quarters the trade was much larger than last year, while in some parts of the city florists did not do as well as last year. The New Year's trade averaged less than half what it was a year ago. Some florists state that any ordinary day's sales are better than those on New Year's day. Altogether the volume of holiday trade was less than last year. The demand for cut flowers exceeded all others; most florists offer so many beautiful boxes for sending them in, that they are preferred to designs. New Year's there was a small demand for handsome baskets. Green decorations were in brisk request, and a large number of plants, jardinières of growing plants and table ferneries were disposed of. Cyclamen plants, miniature orange trees and winter-blooming azaleas sold readily. American Beauty and Jacq. roses were in strong demand, with a scarcity of the latter. Forget-me-not was in active request, as was lilac and lily of the valley. Of the latter flower there is much more used than last winter. Violets were in large demand. Peach blossoms were the novelty at Klunder's. Prices were somewhat less Christmas than last year, and were considerably less New Year's. B.

Holiday business has been quite up to last year; we can safely state a little increase in the cut flower line. Loose flower orders predominated, especially for choice roses. There was a good demand for orchids, both loose and in large handsome baskets. Outside of fine roses, violets, Roman hyacinths and lily of the valley were most in demand. Quality rather than quantity was sought for. A great many table pieces were made up of choice holly and mistletoe trimmed with poinsettias. Southern pines, holly and mistletoe were mostly used in trimming houses; not so much wreathmaking was used as in former years, and formal designs either of flowers or greens were less in demand than loose informal bunches and loose cut flowers. Ornamental foliage and blooming plants sold well. Pink and white seemed to be the colors most demanded; easel-shaped baskets took well, showing off the flowers to best advantage. There seemed to be no scarcity of flowers; the supply was quite up to the demand. More choice holly and mistletoe could have been sold; both of these articles in good quality were short. Orchid blooms took the place of large and high-priced roses in many instances. Prices on the whole



THE BUTTERFLY BED AND SCHILLER STATUE; LINCOLN PARK, CHICAGO

were quite as good as last year. In Christmas trees small and medium-sized trees of good shape and well furnished sold better than the larger trees formerly so much called for. H. A. S.

PEORIA, ILL.—Trade larger. Call entirely for loose flowers and blooming plants. There was an increased demand for cut roses; after these, carnations and lily of the valley were in most request. The call for green was more than double that of any previous year, holly branches taking the place of wreaths, etc. Very little call for mistletoe. Prices were high, too high, in fact, for the best interests of the trade.

#### Moving Decorative Plants in Cold Weather.

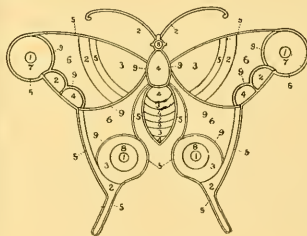
Our method of keeping frost from our decorative plants when taken out during very cold weather is very simple; still many may not have thought of it, and we describe it for the benefit of those.

All small plants are set in boxes—as large as two men can carry when filled—and a jug of hot water put in the box, which is covered by a blanket when placed in the wagon. Tall plants—four to ten feet—are tied up with wadding and paper and laid down in the wagon, a blanket having been first spread on the floor, and two or three jugs of hot water placed among them, then all covered with blankets.

We moved two loads a distance of three and one-half miles yesterday, with the temperature 2° below zero, and had nothing frozen. C. B. W.

#### Chicago Parks.

Our illustration shows the bronze statue of Schiller in Lincoln Park, and the butterfly bed which occupied a position in front of it the past summer. We give below a diagram with key showing plants used.



#### KEY TO DIAGRAM.

1. *Echeveria metallica*. 2. *Alternanthera aurea nana*. 3. *A. paronychioides* major. 4. *A. versicolor*. 5. Small white shells. 6. *Oxalis tropaeoloides*. 7. *Othonna crassifolia*. 8. *Pilea Casei*. 9. *Sempervivum Californicum*.

#### Decoration at a New Year's Ball.

[See illustration, page 249.]

The upper left-hand sketch shows that part of the ball-room directly opposite the entrance. The upper portion of space between the mirrors was covered by large plaques of palmetto, and the lower part was screened with clematis and laurel vines. Each side of the center mirror was a plaque, on which were the cotillon favors—bouquets of roses of many varieties. Across the top of the mirror was a band of roses and carnations; below this was a garland of *Asparagus plumosus*, which drooped gracefully down one side of the glass. All of the nineteen mirrors in the saloon were embellished in this way, and at the base were banked with foliage and golden tulips, a large spray of spirea rising at one side and American Beauty roses massed at the other; each mirror, however, showed roses and tulips of different colors. A line of smilax extended from one chandelier to another.

The picture on the right shows an adjoining room, which was made into a conservatory boudoir; the walls were entirely covered with foliage. In the center of the apartment was an arch of evergreens and pyramid, which had a summer house effect. A large *Latania borbonica* stood in the rear of this. In the vase on the pyramid was a variety of orchids. Groups of plants were arranged between the mirrors—palms, daisies, azaleas, with holly, spruce and vines for groundwork. The small picture at lower



left side is taken from the "red room." It shows bleached palms with small baskets attached to lower end of each; these were filled with yellow roses. These same designs were placed between mirrors and in spaces of the red walls, with excellent contrast.



From the number of inquiries I have received since the last letter was published on this subject in the *FLORIST*, I imagine the matter is not entirely clear to all yet, and at the risk of being accused of repetition, I again refer to it, for it is really of vital importance. Not only inexperienced growers make mistakes in this particular, for I have known several old cultivators and men of long experience to fall into the error of pruning tea roses during active growth. It is quite a common thing to hear men say (florists and gardeners generally) "such and such a new rose will not grow for me; it has been propagated to death." This in many cases is quite true; yet these same men will often thin out all the wood possible from a rose bush because it has produced considerable blind wood, with the idea that they are going to make it produce stronger shoots and more bloom. They forget that for every green leaf they cut away they are destroying so much root action, till by the time they are through thinning the plant out—as it is usually called—they have virtually destroyed fully half the plant's root action, and yet this plant is supposed to be benefited by the operation.

We all know that the more root action a plant has the more thrifty and productive it will be; destroy that root action, and the plant will receive a check just in proportion to its natural vitality to recover itself, and start out anew. By pruning a tea rose severely during winter, you are treating it exactly as the propagator of many new varieties has done, simply taking all the wood possible off, with just this difference—the next growth in the pruned rose will generally be allowed to stay on till in time the plant will, if carefully treated, recover from the severe check, and towards spring produce a fair proportion of flowers; on the other hand, the man who wants wood alone, will cut the next growth away also for cuttings, and by that time the plant will be about ready to stand still and refuse to grow. The last-named practice is equally bad for all concerned, as the cuttings taken from such plants will never grow with that freedom or vigor necessary to make a good plant; and yet the advocates of pruning would have us believe that a rose can be improved by having all the blind wood, etc., pruned out in fall or winter. Any one doubting the correctness of my conclusions can easily demonstrate the same to their own satisfaction by selecting a bench of any variety in good healthy condition, and from one-half cut away all the blind wood and thin it out to give the plant sunlight as it is generally done, allowing the other half to remain as it is, merely picking off any

dead leaves as they appear; treat both alike otherwise. I venture to assert that not one in one hundred will ever want to repeat the trial, or prune a rose severely again during active growth.

While on this subject, a few words about rose cuttings may be of service to some. For many years I followed the practice of never putting in a cutting for my own use till February or March, and I have never yet had a cutting rooted in November or December make as fine a plant or produce as good flowers as those put in during February or March. The reason for this is easily accounted for; after the days begin to lengthen the plants grow stronger and produce harder wood, consequently the cutting is firmer and produces better roots and top from the start, and will grow right along from the day it is taken out of the cutting bench. On the other hand, the fall struck cutting is taken from comparatively soft growth, and after being potted up will often stand still for weeks together during midwinter.

Success in this, as in all other matters, entirely depends on strict attention to



KALMIA LATIFOLIA

business. Keep the young plant growing on steadily, and give it a larger pot immediately it needs one, not waiting till the plant becomes root-bound, stunted and diseased, and then expect it to do as well as one that has been fairly treated. Start with a good sound cutting taken from a healthy plant, treat it all the way through as near as possible to nature's dictation, and the result will be success. Summit, N. J. JOHN N. MAY.

ROSE-BUGS.—Can some of our experienced rose growers tell me some other method of exterminating these pests than throwing out the plants and putting in new soil? S.

CONTESE DE FRIGNEUSE.—I have tried this rose and it has proved worthless with me. How is it with others? I would like to hear from those writers who were recently recommending it for forcing. J. T. A.

Rose Mrs. John Laing.

We present an illustration of this candidate for the favor of cut flower growers. It is one of Bennett's hybrids, is pink in color and fragrant. The illustration was loaned to the *FLORIST* by Mr. A. Blanc, the Philadelphia engraver.

Kalmia Latifolia.

Commonly known as calico bush, mountain laurel, and spoon wood, is one of our commonest and most ornamental wild shrubs. Indigenous—"New Brunswick and the northern shores of Lake Erie, south to western Florida, and through the Gulf states to western Louisiana and the valley of the Red River, Arkansas." In the north we know it as a shrub only; along the southern Alleghenies it often attains the proportions of a small tree a foot or more in diameter and thirty or more feet high.

It grows in the greatest abundance in the hilly woods around here, sometimes in very shady places but always in finest condition in more open parts and waste fields. Its period of blooming is from about the 20th of May till about the 20th of June, differing more or less according to the season and situation.

As a beautiful garden evergreen shrub it has no superior; but, also we seldom find it in happy condition in our gardens. Although they grow in the woods around us in the greatest abundance, they are few in cultivation. It is useless to lift the old plants, we seldom succeed with them; sometimes when we get isolated stocky specimens growing in the hard ground, by lifting them carefully and heading them in pretty well, we may succeed in getting tolerably nice plants. Some people when they lift them cut the tops right down to the ground and depend upon the growth to come. But the best way of all, and I believe the only successful way of dealing with this shrub is to get young seedlings, a few years old, and grow them along in nursery rows for a few years before finally planting out in the garden. Hereabout I have failed to find many young seedlings in the woods, but along the mountains where the laurel abounds, young seedlings appear in quantity.

The finest artificial plantation of *Kalmia latifolia* I have ever seen is that recently made at the Arnold Arboretum, where some thousands of bushy young plants now two to three feet across, have been planted out permanently in one block. These plants were collected by Mr. Dawson a few years ago in the mountains of western Massachusetts; they were then only a few inches high. Some of our nurserymen rather than be bothered raising it from seed, or collecting the wild seedlings, import the young seedlings from Europe, and then grow them on in their nurseries for a few years.

Long Island. W. F.

#### Notes and Comments.

A good many of our growers are experimenting with chemical fertilizers now, chiefly nitrates and ammoniacal salts. There is one point, however, wherein horticultural and agricultural chemistry differ. Analysis will tell the different constituents needed to nourish wheat and potatoes, and in what the difference lies; it may—doubtless will—tell us the chemical difference between carnations and roses, but would it show any actual difference between *Cusins* and *Beauties*? Hardly, as far as chemical constituents are concerned, but we certainly cannot treat these two roses just alike. We want more scientific knowledge of culture, but it must always go hand in hand with the practical knowledge we call rule of thumb.

Sulphate of ammonia appears to produce very good results upon roses when



MRS. JOHN LANG.

mixed with other ingredients. This, like other fixed salts of ammonia, must be thoroughly diluted with foreign matters, or it remains quite inactive in the soil, forming no chemical reaction, and therefore exerting no beneficial effect upon plants. A top dressing which produced some very strong roses was a mixture in the following proportions: Five pounds sulphate of ammonia, twenty pounds bone meal, one hundred pounds soil, the whole being screened until it was thoroughly incorporated. This was spread upon the soil in the proportion of one pound of the top dressing to each square foot. Judging from the plants, it was a very efficacious fertilizer, and it has the advantage of not clogging the roots, as many top dressings do, and thus obstructing the plant's breathing. Nitrate of potash is also much used, chiefly in solution in a liquid manure.

The soil which produces those Nyack roses is from the top of an old swamp, though quite free from the sourness usually found in such earth. Mr. Foley, who grows Mr. Tucker's roses, says he only uses a little bone meal in combination with ordinary manures, but there is every probability that the soil is naturally very rich in mineral alkalies. The soil used by Mr. DePew is similar.

That troublesome smilax-eating caterpillar, which seems almost identical with the cut-worm, is still bothering some of our growers. An application of lime water to the soil, combined with hand picking, seems the best remedy, though often ineffectual.

A "new" carnation was to be seen around the holidays—a white flower splashed and fringed with bright green. A cursory glance by any one familiar with flowers showed that the color was artificial, instead of being a flower sporting into leaf form; it was evidently colored by the absorption of some chemical,

most probably sulphate of copper. It was certainly ingenious, but one with a sense of artistic fitness can hardly commend painting the lily, as the man who wrote Shakespeare says. The florists rather looked upon these flowers as a horticultural joke, but a good many of them were bought in all good faith by the admiring public.

Opinions vary a good deal as to the holiday trade. It is conceded that flowers were scarce; few growers were cutting a full crop of roses, yet the average price was not large. Bulbs were plentiful enough; they are likely to be for some time to come. Beauties were very scarce; it was almost impossible to find any New Year's morning, so their place had to be filled with *Magna Charta*. The trade price realized by the latter on Jan. 1 was \$9 a dozen. Beauties brought about \$12 a dozen, taking them just as they came, and as many of them were very poor, it hardly paid the retailers to handle them.

The New Year's trade was not nearly so good as Christmas, as most of the wealthier people now spend that holiday out of town; New Year's day receptions are quite out of date among people of social prominence.

Lilac, and very good too, averaged a dollar a bunch. Whether this pays is a question for the growers to answer; native plants may, but imported stock, which often costs about 65 cents a plant by the time all charges are paid, must

produce a lot of flowers before expenses are returned.

Of carnations Grace Wilder, in spite of unsatisfactory qualities, takes the lead, in consequence of its desirable color; it brought from \$2.50 to \$3 a hundred at the holidays. Very fine violets brought \$2 a hundred, but a good many brought less. Mermets brought 25 cents at Christmas, and 20 at New Year's day, but there were a lot of poorly-colored ones in the market which sold much cheaper. Perles brought 15 cents, and Niphetos 12. Next season we shall probably see more Sunset than Perles, judging from popular sentiment.

The orchid market is fairly settled; the values do not seem to fluctuate very greatly. Siebrecht & Wadley fill a good many outside orders for these flowers, sending them as far west as Indianapolis, in addition to their home trade. *Laelias* run about \$4 a dozen, counting by the single flowers, though they are of course sold on the spikes. *Dendrobiums* run about the same value. *Calanthes* are sold by the spike; they range from 50 cents to a dollar each, according to size and quality. *Cattleyas* are sold by the single flower, and they average from 50 to 75 cents each. *Cypripediums* vary in price according to the variety; the ordinary kinds, insignis and the like, bring \$2 to \$3 a dozen; fancy varieties, such as *Spicerianum*, *Sanderianum* and others of that class, run up to \$5 a dozen. *Lycastes* run about 50 cents apiece. Taste has become more cultivated since orchids first became known to the general public, and the mere fact that it is an orchid flower will not sell one, unless it possesses merit into the bargain.

Mr. Wadley has a strong impression that the Puritan will be something of a success later in the season; it is quite possible that the apparent immaturity of its flowers is at least partly due to its being forced before it is sufficiently developed for the process.

EMILY LOUISE TAPLIN.

BOUVARDIA PRESIDENT CLEVELAND.—This has been awarded a certificate of merit by the Royal Hort. society, London.

A FINE MIGNONETTE.—Mr. Jos. Tailby, Wellesley, Mass., sends us a spike of mignonette cut from one of his last year's seedlings. It is a handsome specimen. The head is compact, the flowers being borne on pendulous branchlets from the main stem, and nearly all the flowers open at the same time.

GERANIUMS.—Watch your young stock and don't let them crowd each other. If crowded for room, pinch off some of the larger leaves, and in this way admit light between them. Throw out a portion rather than let them all become drawn. Grow good stuff or none at all. It will pay in the end. G.

NEW CARNATIONS.—Mr. Chas. Krick sends us specimen blooms of his new carnations, "Elmont" and "Volunteer." The first is a crimson of good color and form, and the second is variegated pink and white. All the blooms sent were on stems of good length, and none had burst the calyx.

WE HAVE RECEIVED a box of the new carnation, "White Gem," from Geo. E. Buxton of Nashua, N. H. The variety we think merits the originator's description, which he sends on application. If it is as free a bloomer as the sprays we saw would indicate, it should be very profitable for cut flower growers.





For Cut Flowers.

Many years ago, when orchid collections were rare, their cultivation was surrounded by the greatest mystery; their habits and requirements were little understood; they were subjected to all sorts of improper treatment; they roasted and steamed in little close houses, and dried and rested until most of them went to their long rest, and their places were supplied by fresh importations, to receive similar treatment with a like result. A good-sized orchid collection in those days required the services of a large force of men, to sponge the leaves and pseudo-bulbs, to destroy the scale and other insects which weakened and killed the plants. Those grown on blocks of wood and in baskets had to be taken down and dipped in a tub or tank, and hung up to drip before they were returned to their places, so that no water would fall on the foliage of those grown beneath them.

It is only within a recent date when progressive commercial men and a few others, contrary to the writings of would-be authorities on orchid culture, have introduced the use of the hand-hose and abolished the parasitical pests and done away with much useless labor. The methods of cultivation have been so simplified since growers have better understood their requirements, that many have been induced to enter into their cultivation, both for private enjoyment and market purposes, and the day is not far distant when nearly all large commercial establishments will grow them to some extent.

When we consider for a moment the geographical distribution of orchids and the varied climatic conditions under which they grow, it seems wonderful that they may nearly, or I may say quite, all be grown under one roof successfully. The orchids from the East Indies, the Malayan archipelago and other tropical parts of the old world, do not require the high temperature which it was once thought necessary to give them; the fact that most of them will make their growth during our summer, when it is sufficiently warm, and that comparatively little heat will answer in winter during their season of rest and bloom, enables us to grow them in the warm end of the same house where we may grow the *Kalias* from Mexico, the cattleyas from Brazil, and other tropical American orchids in the intermediate section; with the beautiful odontoglossums, masdevallias and other cool sorts from the elevated districts of these tropical countries, in the cool end.

In order to provide the proper conditions under cultivation, it is necessary to know something of the conditions under which they grow naturally; such as the latitude, whether from the low, hot districts, or high, cool, mountainous regions; whether the position is exposed and sunny, or shaded; and for terrestrial sorts—those growing in the ground—the nature of the soil should be known. A knowledge of these and kindred points is essential to their successful cultivation, for the great object is to imitate nature so far as lies in our power.

The epiphytal orchids—those growing on trees, rocks and in other elevated situations—need a small amount of material on which to feed, for although they are commonly supposed to live on air, in reality they have an accumulation of rich material, formed by falling leaves, ferns and lichens which grow among the roots, the dead bodies of insects, the excrements of birds, etc., all of which, with the action of time and copious rains, yield suitable material in sufficient quantity for their moderate requirements. In cultivation, if they are tied to blocks with a little moss, or placed in pots nearly filled with broken crocks and an inch or two of moss, or a mixture of moss, fibrous peat and charcoal, or other rough material, they do well enough.

The terrestrial kinds—growing usually at the base of trees, near rocks or clumps of bushes where the soil is generally light and fibrous—will do well in the same material, but require more of it; and for cypripediums and a few other strong-growing kinds, a little peat or turfy loam may be added; however, in all cases the drainage should be perfect to allow of frequent waterings.



INCONVENIENT HOUSES.

From a commercial point of view, the value of orchids has lain largely heretofore in the prices realized from the sale of plants, some of which have brought almost fabulous sums; but the florist of to-day will have his attention drawn more particularly to the daily market value of the cut blooms. Do orchids pay? Can you sell them? are the questions, or rather conundrums, which are frequently put to your essayist. To the first he would answer that by judicious selection of a few free-growing and flowering sorts, with proper treatment, a good return may be had on the investment, and fair compensation for the labor and expense of cultivation. To the second question, yes, and would add that if more orchids were offered, more would be called for; the fact that a steady supply cannot be depended on is the only plausible reason from a business point that the retail florist has to give for not using them more in his work, and thereby increasing the taste and creating a greater demand for this beautiful class of flowers.

In conclusion, drop the old time mystification which has surrounded orchid culture; use plain common sense, and grow and treat your orchids with the same consideration for their wants which you would any other class of plants, and success will crown your humblest efforts.

Malden, Mass. B. GREY.  
[Read before the Gardeners' and Florists' Club of Boston, Jan. 3.]

### Inconvenient Houses.

The accompanying sketch is taken from life, and illustrates part of the experience of a lady who last spring decided to select from the stock of a neighboring florist a quantity of plants to ornament her grounds during the summer. She wanted something different from what she had last year and thought she would look through the greenhouses and see if she could find something to suit her fancy; but after she had succeeded in climbing over a half dozen runs of pipe, crushed her spring bonnet and sprained her back squirming through little openings which the florist dignified by the title of "doors," and gathered in her skirts a peck or more of dust from her journey through the "packing room," she concluded that retreat was advisable and that "a bed of geraniums such as she had last year would be all she wanted."

The greenhouses are of necessity both manufactory and salesroom, and while we may not be able to keep them as clean and have them as convenient as the average salesroom, a vast improvement can be made in nine-tenths of the places of those who cater to a retail trade. It pays to have your houses in such shape that a lady can walk through and examine your stock with some degree of comfort, for to them must you look for your principal patronage.

### Plant Notes by Wm. Falconer, Long Island, N. Y.

**PASSION FLOWER** *Constance Elliott*, after having endured 23° of frost, isn't dead yet. The younger branches have been killed, but the main stems seem to be all right.

**CLIANthus DAMPIERI** lived through several sharp frosts unscathed, but to° killed it.

**BAUERA RUBROIDES** is a slender but very bushy little shrub from Australia that all winter long bears its rose-colored flowers in great profusion. Easily managed as a pot plant and in a cool house.

"**UMBRELLA PLANT**" is the name commonly given to *Cyperus alternifolius*. But as this isn't in Miller's dictionary.

**CRASSULA LACTEA** is about past, but *C. quadrifida* has a copious burden of London-pride-like blossoms. Both are nice cool-house plants.

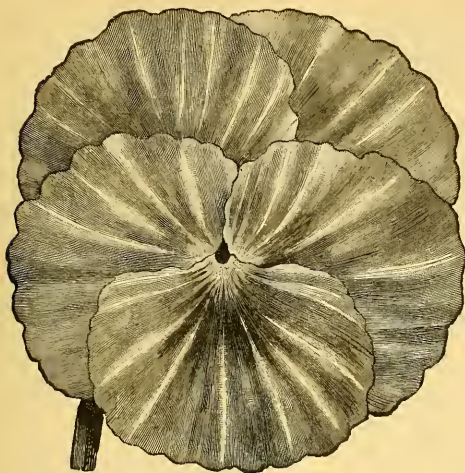
**ANEMONE CORONARIA** from seed sown last spring are now in bloom planted out in a warm frame.

**SALVIA HIERII**, *involucrata*, *gesneriflora* and *reutiana*, although still in bloom, take up more room than they are worth. They are very good in our summer gardens, but I think we can fill our greenhouses in winter with a good deal more serviceable plants.

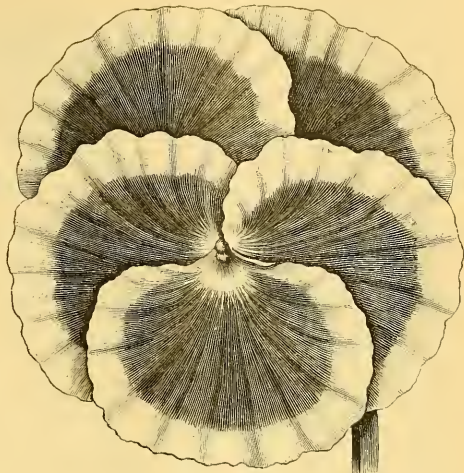
**HELLEBORES** grown in pots and now in my calcicaria house are in bloom, but those in cold frames have not yet shown signs of flowering.

**HARDY CYPRIPEDIUMS**.—Have just brought in a few pots for forcing. Had them till now in a cold frame from which frost had not been fully excluded. Will bring others in in succession. About the end of March will store the balance in the ice house, and thence bring them in as I want them for June and early July flowers.

**TRILLIUM GRANDIFLORUM** is another wild flower that I treat in the same way as I do the hardy cypripediums, only as it is more sensitive to heat I have to treat



GIANT STRIPED PANSY.



GIANT FIVE SPOTTED PANSY

it accordingly. Both brought in at one time and otherwise treated alike, the trilliums would be in bloom before the orchids had well started to grow. Grown in pots and boxes and treated as above, both did very well with me last year.

MY DOUBLE CINERARIAS are showing a greater variety of color than they used to do, also a large percentage has come double. While the singles make the prettiest pot plants, they are of very little use as cut flowers, but the doubles last well when they are cut.

IXORAS are very welcome in winter. Although perpetual bloomers, they seem to particularly favor me about Christmas, when their large heads of orange and scarlet come in to good advantage. They need warm, genial quarters at all times. They are grown a good deal in private gardens, but very little by florists; even those who make a specialty of fine plants report no sale for ixoras.

STRELITZIA REGINÆ is a gorgeous old Kaffir, yielding its showy orange and purple-blue flowers abundantly in winter, and too, often more or less throughout the rest of the year. The flowers last well when cut, but on account of their large size, odd and stiff appearance, they are seen to best advantage on the plants.

GLOXINIAS.—Pot up a batch for April.

HYDRANGEAS.—Bring in a lot, and don't forget to try some *H. rosea*.

ROGIERA GRATISSIMA is a Mexican evergreen shrub that is now in bloom with us. Every shoot is terminated by heads of pinkish laurestine-like flowers that are very sweet-scented. Very pretty as a plant, but as the florets drop so soon, of little avail for cutting.

FREESIA REFRACTA ALBA is the best of all, and now in perfection. And we can have it in succession for a couple of months yet. The bulbs multiply exceedingly, and we can force them year after year.

LEPTOSYNE MARITIMA has been in good bloom with me since the first of December, and is the brightest yellow flower I have. Capital for cutting. Raise it from seeds every year.

ALLAMANDA SCHOTTII.—In warm greenhouses where there is plenty of head room, this noble vine may be had in bloom in abundance in winter, when yellow flowers, apart from bulbs, are not very plentiful.

CLERODENDRON BALFOURI.—I have it in good bloom now in a stove greenhouse. Cut the vines in close in August; kept them dry for a few weeks, then let them come along slowly. They are very showy in the greenhouse, but the flowers soon wilt after being cut.

LIBONIA PENRHOSIENSIS is now in full bloom, and a very pretty plant it is. It comes in immediately after *Serico-graphis Giesbrechtiana*, and before *Libonia floribunda*, which is also opening its flowers. While these two libonias are not showy enough for use as cut flowers, their compact habit and profusion of bloom render them very desirable greenhouse decorative plants. I raise a fresh lot from cuttings every year.

#### Giant Pansies.

Mr. Fred. Roemer, Quelinburg, Germany, has sent us specimen flowers of a strain of giant pansies which are quite remarkable for size and coloring. The accompanying illustrations are life size and are good representations of the specimen blooms sent.

#### Talks About Annuals.

BY M. B. FAXON.

I.

If the reader will stop and think a moment, he will no doubt agree with the writer when he makes the statement: "More attention is being given to the cultivation of annuals," and it is high time, for amongst our annuals are some of the most beautiful flowers that grow.

What flower can compare with the sweet pea, with its beautiful form and delicate fragrance? Your answer is: An orchid. Yes! an orchid does, or rather the sweet pea is the only flower that grows that can be made into a bouquet

or design with an orchid and not detract from its beauty; in fact, putting these two flowers together seems to add a charm to both, if that were possible. But your orchid from which you cut a few flowers costs from \$5 to \$500, while \$1 will buy sweet pea seed enough to plant a row from which in season a large bunch of flowers can be gathered every day; and the best part of it is that the more you pick the more you can pick.

Again, where can be found in the whole floral world a more "superb" flower than the aster? And in fact the whole family of annuals is replete with floral beauties. But as it is my object to write a few hints for the cultivation of annuals, I will begin without further delay with my arch favorite, the aster.

#### THE ASTER.

I usually make two plantings of asters—the first about the 1st of March, and the second the 1st of April—in the greenhouse in shallow boxes, and as soon as the plants are well up prick them out into thumb-pots. From that time until they are set in the open ground where they are to remain, the greatest care is necessary to keep them from becoming spindling. "Keep them as cool as possible and still keep them growing," is what I am continually writing my gardener, and if this is attended to, good stocky plants will be the result. About the 1st to the 15th of May the plants should be set in the open ground in rows or beds, as the cultivator may prefer, but in either case the plants should be set at least eighteen inches apart—two feet is better if one has plenty of space.

The bed in which asters are to grow must be rich; green manure must not be used. My plan is to spade into my aster beds every fall a good dressing of well-rotted barnyard manure, say at the rate of twenty cords per acre. Let the bed lay until spring; then give a good dressing of some chemical fertilizer, dig over the bed, rake it smooth, and it is ready for the plants. If the weather is dry when the plants are set out, they must be watered until they become thoroughly established. Keep the soil loose and free from weeds until the buds begin to set,



when all cultivation must cease. When the plants are two-thirds grown they should be tied up to stakes; otherwise, if a heavy storm should come when they are in bloom, the plants will be leveled to the ground and the flowers covered with dirt and spoiled. A bed of asters is in its prime from eight to ten days, and a grand sight is seldom seen than during this time, especially before any of the flowers have been cut.

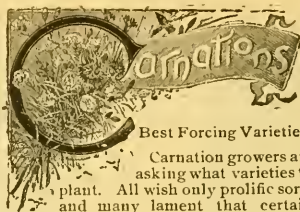
#### THE SWEET PEA.

It is a question in my mind whether the sweet pea is not the most beautiful annual in cultivation. Its delicate fragrance, beautiful form and variety of coloring make it a favorite with the florist, while its culture and long continuance of blooming secure for it a place in every flower garden. Sweet peas must be planted as early in the spring as the ground can be worked. The seed should be sown in drills and covered at least six inches deep. This may be done in two ways. Having prepared the ground and made the drills the desired depth, drop the seed and draw into the drill earth enough to cover the seed two inches deep. As soon as the plants appear through this covering, draw into the drill two inches more earth, and so on until the drill is filled even with the surface of the ground; or the seed may be dropped and covered in the usual manner. The surface of the ground sometimes becomes hard just as the young plants are about to appear, especially after a shower followed by a hot sun, and unless some means is taken to prevent this, many of the young plants will not break through the soil, and no more will be seen of them than if the seed had not germinated at all, and those annoying "gaps" will appear in the rows. A slight raking just as the plants are breaking ground will prevent this, and also kill any small weeds that may have started. The only laborious task in the cultivation of sweet peas is bushing them, and bushed they must be almost as soon as they are well up. Having plenty of birch brush at hand, the writer uses that, bushing the same as for tall-growing garden varieties. Wire netting makes an excellent support and is very neat. Whatever they are trained upon must be firmly secured in position, as the vines when fully grown will be blown down unless very strongly supported. Whatever supports are used, it will be found an excellent plan to place them in position before the peas are planted; then sow a row of seed on each side of this support, which, when the vines are fully grown, will be entirely hidden from view, and a beautiful wall of flowers will be the result. If I were asked to sum up the whole secret of sweet pea culture in one sentence, I should say: "Plant early and plant deep."

Boston, Mass.

PHILADELPHIA.—At the meeting of the Germantown Hort. society Dec. 8 officers for the ensuing year were elected as follows: President, B. H. Shoemaker; vice-presidents, Jonathan Jones, Chas. J. Wistar, Dr. M. M. Walker; secretary, Thos. B. Meehan; treasurer, Joseph Meehan.

THE INTERNATIONAL EXHIBITION AT GHENT, BELGIUM.—This will open at Ghent April 15 and continue to April 22, 1888, under the auspices of the Royal Agricultural and Botanical Society of Ghent. The prizes consist of eighteen subjects of art, 120 gold medals, 500 silver gilt medals, and 550 silver medals offered for competition in 410 classes.



Carnation growers are asking what varieties to plant. All wish only prolific sorts and many lament that certain varieties disappointed them. That old favorite the Snowdon is now in bad repute with many. Formerly few sorts equaled it in bloom. Now we have enquiries about as follows: "What is the matter with the Snowdon carnation? The plants are models of good health and vigor, yet we have very few flowers—we are disappointed."

We think a whole bed may become sterile in time, and about in this way: Cuttings taken indiscriminately may have a proportion from plants which have borne no flowers. Such plants grow wonderfully and become as large as a bushel measure. They produce a great many cuttings, all of which will be like the parent, unproductive. The prolific parents on the contrary make few cuttings and thus in a few seasons one's stock of Snowdon becomes unproductive of anything but foliage and stems. So disappointed were we the last year, that we concluded to reject the Snowdon entirely. On second thought however, we concluded to take cuttings only from the most floriferous plants. The result is a bed of plants as productive as we could wish, and very satisfactory.

This tendency to sterility or unproductiveness is greater with the Snowdon than with other varieties, and in future we will propagate only from floriferous specimens. Some growers complain of Edwardsii, others with ourselves believe it to be one of the most profitable ones; looking over our beds of this variety we do not find a plant that is not floriferous. Indeed all the sorts—except Snowdon in the past—are as productive as we can ask.

Of the many varieties introduced last year only a few are worthy of culture, and this is the case every year. One of the old varieties—President De Graw—is likely to come into favor again. Last year it did well and also this year, but for it, our stock of early flowers would have been short. Hinz's White is a fine sort but it is rather late, and out of doors does not usually grow as vigorously as some others; even when dug in the fall the plants are often small and require some time to recuperate. Amongst pink varieties Grace Wilder is very satisfactory. True, the flowers fade prematurely and it has a tendency to bloom in crops. Grace Pardon takes its place in some particulars though a little dark in color and not quite as double. It excels the preceding in vigor and in regularity of bloom.

Century is magnificent, but it produces few long stems. Amongst dark crimson and maroons we have yet the King of the Crimson and Seawan, and these will answer for a little while as the coming crimson is yet scarce and too high for general cultivation. It appeared, however, a year ago and will no doubt appear in the catalogues at an early day unless some imperfection shall be discovered.

Of several yellows, Buttercup is still unrivaled. Its early and constant bloom, magnificent flowers and good health and vigor are all that can be desired. In one

particular mainly can we ask an improvement—it has a few red streaks. Portia grows in favor. As a grower it is unsurpassed, and its intense fiery scarlet, with long stems to a large proportion of the florets make it a favorite among florists.

It was not intended in this article to allude to all the desirable varieties of the carnation, but rather to mention our own experience in reply to many esteemed correspondents in relation to the Snowdon. At one time it was thought that the main stock of white pink would be supplied by it. Gradually it became unproductive, but by the careful application of the remedy suggested it will become as popular as ever until a new white seedling appears as prolific and as good in every way, with the advantage of more long stems. For such a sort there is room, and it is said that there are already several candidates awaiting announcement.

Unionville, Pa.

THOS. F. SEAL.

#### Odds and Ends.

As I sit down to write this letter I am reminded by an unwonted din in the outer world, that another year is drawing rapidly to a close, and I feel that I cannot make a better beginning than by wishing my fellow readers of the FLORIST a very happy and prosperous New Year—to be sure my congratulations will be received at a somewhat late day, since the new year will be in its teens before this is in print, but I find some comfort in the maxim that "Tis better late than never." In noting the successes of the past year, we will all find that numerous failures are also to be recorded, and there can be no better time than the present for adopting such methods as will prevent a recurrence of those failures during '88. Florists, like men in other vocations, are seldom satisfied with moderate success, we have all a desire to "spread our wings for some loftier flight," but while studying to increase our individual prosperity, and to avoid the failures encountered in the past, we should not overlook the fact that to each of us belongs a share of the work of promoting trade interests generally; and it would be well, if at this season, proverbial for good resolutions, every reader of the FLORIST would resolve to address himself in future with greater zeal to this work. To begin with, let there be a more general recital of our experience; the most casual observer, looking over a volume of the FLORIST would be impressed with the limited number of its contributors, in proportion to the number of practical florists in the United States, and yet there is not one florist in the country who could not from time to time recount some bit of experience that would prove valuable and interesting to many others.

The last meeting of the Florist Club was one of the best yet held; there was a very instructive discussion on the subject of bedding plants. Geraniums were regarded as indispensable for summer decoration, particularly the double varieties. Mr. Wm. Fraser thought that double pink and white ought to be more generally used. Mr. Ed. Hermann considered geraniums unsuitable for city squares, where as a rule they receive but little water. This however is a mistake—geraniums are a class of flowering plants that stand drought well. I had two fine beds last summer that were a perfect mass of bloom the whole season and they had not a drop of water from the time they were planted, except what providence sent, and that was very little.

Watering a geranium bed, as flower-beds are generally watered, spoils the bloom more than it benefits the plants. Beds of scarlet geraniums are perhaps growing mounotonous, and as Mr. Fraser said, the general use of other colors would be a positive relief, but as to white geraniums, single or double—while there are several good varieties—I have for my own part never taken kindly to them for out-door work, as the least shower of rain quite disfigures them.

Cherry and peach blooms are not prized very highly in their season, but during the holidays they prove very acceptable; good branches three to five feet long set in water and given a warm current, will bloom in from fifteen to twenty days, yielding pretty sprays of flowers and foliage.

The holiday rush having subsided, our florists are getting down to steady work in preparing for spring trade; a run through the different establishments shows plenty of young stock in excellent condition. There are florists here and elsewhere, who find some particular stock as specially adapted to their trade, and in such cases it is folly to handle a general collection; grow only such plants as experience shows to be most marketable, and grow them well; a badly grown plant of any kind is hard to dispose of—even hard to give away. As room is required many things that have been occupying space may be removed; bouvardia can if necessary be disposed of in boxes and set out of the way till spring. Unless in cases where cut flowers are the principal feature of the business, there is little use keeping bouvardia on the benches after the holidays.

A. W. M.  
Baltimore, Md., January 1, 1888.

GRAND RAPIDS, MICH.—At the annual meeting of the Grand River Valley Hort. society Dec. 21, the following officers were elected for 1888: Chas. W. Garfield, president; J. A. Pierce, vice-president; W. N. Cook, secretary; E. C. Phillips, treasurer; E. C. Bailey, Robt. Graham, E. M. Ball and Thos. Wilde, executive committee.

#### SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order.

**SITUATION WANTED**—By a first-class rose grower and plantsman. Best of references. Address GROWN, care American Florist, Chicago.

**SITUATION WANTED**—By expert rose, carnation and grape grower; age 25; single; steady. Address care of W. C. HARCUS, Central Falls, R. I.

**SITUATION WANTED**—By experienced florist; Norwegian; single. Best references from Norway, Germany and this Country. Early forcing of cut flowers a specialty. Private or commercial. Western place preferred. ARNE ZETTLITZ, 185 W. Erie St., Chicago.

**SITUATION WANTED**—By a first-class rose grower, or around Chicago, has had 20 years experience. Married and has small family, can give good recommendations, or a month's trial. Address 166 Jane street, Chicago.

**SITUATION WANTED**—By an experienced cut S flower and plant grower and floral designer, as foreman, capable of taking charge of business. Good references as to character and ability. Address W. J. F., care W. J. Stewart, Boston, Mass.

**SITUATION WANTED**—As gardener or florist; S private or commercial, by a first-class man in every branch of the profession; 30 years' experience, 16 years in America, north and south; first-class carnation and rose grower, forcing grapes, etc. Can make up designs, etc. in the most artistic style. English; age 44. Address GARDNER, P. O. College Hill, Hamilton Co., Ohio.

**WANTED**—A practical florist who understands growing and seed and general stock, a good position to a steady man. Apply to JAMES PAPE, Toronto, Ontario, Canada.

**WANTED**—A young or middle aged man who understands how to do anything about a florists' establishment; putting, setting plants, picking out catalogue orders, etc. State wages expected. Ad immediately N. S. GRIFFITH, Independence, Mo.

**WANTED**—A partner in the seed business. Address F. N. LANG, St. Paul, Minn.

**WANTED**—A young man who understands growing plants and cut flowers for market. State references, wages, etc. Apply to F. A. CHAPMAN, Grand Rapids, Mich.

**WANTED**—A first-class cut flower arranger, of city experience. Address giving salary expected, references and experience. J. WILKINSON ELLIOTT, Pittsburgh, Pa.

**WANTED**—A thoroughly practical and competent rose grower, to take charge of a large establishment, heated by steam. Address HAYDE, 19 Wabash Avenue, Chicago.

**FOR SALE**—New, Grand Street Greenhouses, cheap for cash, at once; two blocks from State Capitol; convenient to railroad depots and street cars. C. F. FITZSIMMONS, LaSalle, Mich.

**FOR SALE**—Splendid chance for young man with small capital to start in business. Eight houses, in good shape, about 10,000 sq. ft. of glass. 1½ miles from center of city of Springfield, Mass. Terms very easy. Good reasons for selling. Write for particulars to E. W. CLARKE & SON, Springfield, Mass.

**FOR SALE**—The stock and good will of a florist business, in a thriving Maryland town of 4,000 inhabitants. Rare chance for a young man. For particulars address WALKER, care Am. Florist.

**FOR SALE**—The best retail and wholesale florist and seedsmen's business in the Northwest (population 150,000). Reason for selling, with full particulars furnished on application. Address BATA, care American Florist, Chicago.

**FOR SALE**—Established greenhouse, plant and vegetable business, and agency nursery trade—sufficient to make a nice living, in one of the most attractive and pleasant towns on the Ohio river; two railroads and river to ship on; good city trade; 10 miles off and four other good towns near. 3,000 feet of glass; houses nearly new. Good building connected with greenhouses for office and workshop; frame dwelling with 5 rooms. Particulars on application. Address OSCAR WRIGHT, Moundsville, W. Va.

## A. C. TUCKER,

Rose Grower,

P. O. BOX 190. NYACK, N. Y.

Orders are solicited NOW for Spring delivery for the following plants, in any size pots and in any quantity:

PERLE DES JARDIN, NIPHIETOS,  
BON SILENE, LA FRANCE,  
SOUVENIR D'UN AMI, C. MERMET,  
AMERICAN BEAUTY, BRIDE,  
PAPA GONTIER, PURITAN.

Special discount given on all orders received up to Feb. 15th, 1888. Send for circular giving prices and terms.

## A. C. TUCKER.

Mention American Florist.

## 100,000 ROSES.

The leading varieties, at \$4.00 and \$5.00 per hundred.

Fine stock of VERBENAS, \$2.50 per hundred.

Large stock of BEIDING PLANTS at lowest figures. Send for Trade List, now ready.

GEO. THOMPSON & SONS,  
LOUISVILLE, KY.

## WANTED.

ROSE WOOD OF THE FOLLOWING VARIETIES: Marechal Niel, Climbing Devonensis, Cloth of Gold, Gloire de Dijon, Hermosa, Devonensis, La Marque, General Jacqueminot, and Coquette des Biches. We should be glad to hear from any one having cuttings of any of the above to spare, giving quantity and price.

FRASER & LIPPINCOTT,  
HUNTSVILLE, ALA.

## BOUND VOLUMES OF THE AMERICAN FLORIST

VOLUME II.

Handsome bound in cloth with leather back and corners, and title lettered on back in gilt, may now be had from this office.

Price, \$2.25.

AMERICAN FLORIST CO.,

54 LA SALLE ST., CHICAGO.

## OUR SPECIALTIES.

## NOVELTIES IN ROSES

### AND OTHER PLANTS.

—) ALSO (—

### FLORISTS' STOCK FOR FORCING.

## HILL & CO.,

RICHMOND, IND.

### NOVELTIES IN ROSES.

Also the leading forcing varieties Teas, H. Teas and H. Perpetuals. 1,000 large roses in 6 and 7-inch pots: C. Mermet, La France, Suquet, Perles and Bon Silences, at \$25.00 per 100. Chrysanthemums, best varieties, 5 and 6-inch pots, \$15.00 to \$20.00 per 100. Bouvardias, 5-inch pots, \$2.00 per 100. Gardenia Radiants, @ \$5.00 per 100. Grand Duke Jasmine, @ \$8.00 to \$10.00 per 100. 3,000 American Holly, flex opaca, @ \$10.00 to \$12.00 per 100. Choice buds and cut flowers at lowest market prices.

JACOB SCHULZ, LOUISVILLE, KY.

## IMPORTED M. P. ROSES.

Worked low on the Marechal Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagation quickly. Fine plants for sale by the 100 or 1,000, at low rates.

Address

WILLIAM H. SPOONER,

JAMAICA PLAIN, (Boston), MASS.

Budded Roses for Winter Forcing or Spring Market Sales—H. P. and Teas.

#### SPECIAL OFFER:

The following varieties, equal quantities of each, we sell for \$10.00 per 100.

H. P.—Anas de Diebach, La France, Gen'l Jacqueminot, Paul Neyron, Queen of Queens, Comtesse of Oxford, Jules Margottin, Anna Alexiad, Mme. Gabrielle Luetzel, Mme. Khor, Marie Baumann, Gloire Lyonnaise, Her Majesty, M. de Lyon, Alfred Colomb. The following Tea Roses at \$15.00 per 100: Perle des Jardins, Mme. Lambert, Marie Van Houfte, Mme. Falcot, Mme. Charles, Mlle. Franziska Krueger, Duchess Mathilde, Corolla Cook.

Catalogue on application: Dormant buds of the new H. P's of 1887—Earl of Dufferin, dark, nearly black; Lady Helene Stewart, red. The new Tea Rose Miss Ethel Brownlow, similar to C. Mermet, very fine flowering. All at \$10.00 each.

Cyclamen persicum, the plants in buds which will flower in November, \$1.00 each. American Beauty, Bennett, Franziska Krueger, at \$15.00 each, 50c. each.

SCHULTHEIS BROTHERS,  
P. O. BOX 78. COLLEGE POINT, LONG ISLAND, N. Y.

## E. BENARD,

ORLEANS, FRANCE.

ROSES ON THEIR OWN ROOTS  
A SPECIALTY.

NURSERY STOCK OF ALL DESCRIPTIONS.

For particulars apply to

E. BENARD, JR., NILES, CAL.

## —) TREE ROSES. (—

The very FINEST and BEST quality.

GABRIEL MARC,

WOODSIDE, L. I., N. Y.

## JAMES L. BOYSON,

CAEN, (CALVADOS) FRANCE.

1st Prize for Cut Blooms, Paris, May, 1887.

My CATALOGUE OF THE NEW

## EUROPEAN ROSES

will be ready January 1, 1888, and will be sent FREE on application.

A large stock of the last two years varieties, as well as all the older kinds for sale.

Send for my complete Catalogue of over 1,200 varieties, with raisers' names and date of seedling out.

— ROSES. —





## THE CUT FLOWER TRADE.

### Midwinter Floral Fashions.

Next to roses, lily of the valley, forget-me-nots and violets are the most fashionable flowers for personal wear, and what are called "spring flowers"—tulips, azaleas and lilies—with hyacinths and freesia, are the most in vogue for room arrangements. Large roses are in request for gifts. From three to five long-stem blossoms have the thorns cut off, and are tied together close up to the flowers with a sash, on which is stamped in gilt some motto and the date, or only the latter. A cluster of violets, lilies, forget-me-not or mignonette is tied in and turned down on the stems. The roses are laid in a "rose box" the color of the flowers. These rose boxes are made of moire and lined with satin. Boxes for lilies, violets, etc., are gotten up in the same style.

Wedding bouquets of the most stylish description are put together loosely, or chrys, Bride roses, orange flowers and very small oranges being tied close up to the flowers, and a profusion of stems and foliage are left to fall below. Opera and reception bouquets are composed of one flower. Those of Jacqueminot roses are tied with cream-colored satin sashes, or with crimson ribbon if carried by brunettes. Bouquets of forget-me-nots are wired, and are tied with white ribbon. They are all made very large.

Pink is the favorite color for dinner decorations. A low plateau is made over the table, with only end spaces reserved for the candelabra. An arrangement of Mermet roses and pink bouvardia—three roses and a cluster of bouvardia being placed together. A vine of asparagus plumosus is laid around the table above the covers, and sprays of it are introduced in a fanciful fashion over flowers. Sometimes a silver bowl containing lilies stands in the center. A charming bed of stevia and lily of the valley was the decoration of a dinner table this week. The garland has found its way to the table also. It is usually made of Grace Wilder carnations and their own foliage, and is laid diagonally from one end of the table to the other, on a pale pink satin cloth. It is finished at each end with loops of pink satin ribbon.

The two most prominent designs in decoration for apartments are the garland and the bank. Nothing is more graceful and elegant than a garland of flowers and foliage arranged over windows, mirrors, doors and cabinets. Several strings of asparagus are lightly twisted into a large loose coil. Flowers are either tied in this, or a separate chain of them is hung just above the foliage, touching it, and looping a line of color on its edge. The garland always sweeps on the floor, particular care being taken to have the ends handsome. When arranged over a window or mirror, the large end of it is fastened to one side of the

top cornice or frame with loops of satin ribbon or gauze; it is then drawn partially over, and falls down one side.

A bank of blossoms is arranged everywhere possible—at the base of mirrors, in a corner, or in the most conspicuous position in the room. Mantel pieces are not banked, but are trimmed across the front with a garland, and if of Queen Anne style, garlands droop from the top to the floor; vases of large roses ornament the ends, or perhaps an effect with stevia and flowers one side and roses the other. The handsomest banks made are those of orchids and Asparagus plumosus. This is a beautiful way to show these rich flowers at their best. At a recent private ball a bank of stevia and cypripediums was greatly admired. Masses of azaleas are formed into corner banks with handsome effect, and orange trees in fruit (miniature ones) are so placed that a bank of foliage and oranges has a rich appearance.

Palmettos enter largely into large decorations, as do wheat and straw receptacles for flowers. Where many rooms are to be decorated, dried palmettos and the golden straw and wheat are admirable, combined with yellow flowers, in a room, for instance, furnished with crimson upholstery. The screening of corridor walls is very fashionable, either laurel, Cape smilax or other evergreens being used on wire frames. Walls screened with choice vines are much more beautiful. Lygodium scandens grown and trained together in coils being exquisite for this purpose.

Gown garniture with natural flowers is very simple. Lily of the valley is used solely, and this is made into a garland extending from one shoulder across the corsage to the side, where it is finished with a tassel.

FANNIE A. BENSON.

New York.

### Boston.

The cut flower trade has been very dull since the holidays. Very little notice was taken of New Year's.

Freesia, lilacs, lily of the valley, tulips and roses are abundant. Jacqs are beginning to come in in small quantities. Smilax finds a readier sale than it did last year.

Benj. Grey of Malden has a house 100 feet long filled with the pink Cape Cod pond lily, which he is forcing for early bloom.

W. E. Doyle has put his messenger boys into uniform. Welch Bros. have just completed a large addition to their store. Galvin Bros.' new store on Tremont street is a beauty. Progress is the order of the day.

J. G. Coolidge, a well-known farmer and florist of Cambridge, died on Thursday, Dec. 29, aged 67.

Prof. C. S. Sargent is quite ill at his home in Brookline.

Fires.—The greenhouses of Mr. Chas. T. Curtis at Jamaica Plain were burned on the night of Dec. 28; loss \$2,000. The old year gave John Gornley a parting shot in the shape of a fire on the night of Dec. 31, by which his greenhouse was damaged to the extent of \$500. The greenhouse belonging to C. H. Andrews at Lynn was partially burned on the night of Jan. 3. All the above fires were due to overheating.

The Gardeners' and Florists' club held its regular monthly meeting on Tuesday, Jan. 3, at the new club room, about ninety members being present. A paper on orchids (which may be found in another column) was read by Mr. Benj. Grey, and was very favorably received. It was discussed quite freely. The subject of a house warming at the new club room was talked over, and was referred to a committee, which recommends that the event take place on Saturday, Jan. 21.

This seems to be an auspicious time for house warmings, it being whispered that Welch Bros. and Galvin Bros. are both making preparations for extensive spreads in honor of the opening of their new stores.

W. J. S.

### New York Retail Prices.

Bon Silenes, \$1 a dozen; Goutiers, \$2; Perles, Niphotos, Souvs., \$1.50; Mermetts, Dukes, Cooks, Bennetts, Brides, \$3; Cusins, \$2.50; La France, \$3.50; Puritan, \$5; Beauties, Jacques, Hybrids, \$6; Romans, narcissus, tulips, \$1; lily of the valley, \$1.50; carnations, 50 cents; violets, \$2.50 a hundred; smilax, 40 cents a string.

ST. PAUL.—The annual meeting of the Minnesota State Hort. society will be held at Market Hall, commencing the 17th and continuing to the 20th inst.

KNIGHTSTOWN, IND.—A. M. Troxell suffered a loss of \$600 by fire Dec. 28. The fire originated, we understand, from an explosion of natural gas. No insurance.

PLATTSBROUGH, N.Y.—W. J. Hesser's large greenhouses suffered a loss of over \$1,500 by fire Jan. 8. Mr. Hesser's collection of palms, dracenas, etc., was one of the best in the state.

JERSEY CITY, N. J.—An interesting suit against the Pennsylvania Railroad Co. has been begun by Chas. Wrege, a florist, whose property adjoins the railroad. In straightening its road-bed six years ago the railroad company closed a drain, which caused a pond to form, and it overflowed plaintiff's place after every heavy rain. He has brought suit for \$10,000 damages. The company had promised to open the drain, but neglected to redeem its promise.

**THE AMERICAN FLORIST**

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 cents a Line, Agate;

Inch, \$1.40; Column \$14.00.

Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per cent; 12 months, 20 per cent.

No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember.

17<sup>th</sup> Advertisements for February 1 issue must REACH US by noon, Jan. 25. Address,  
THE AMERICAN FLORIST CO., Chicago.

**Catalogues Received.**

J. M. Thorburn & Co., New York, seeds; R. D. Hoyt, Bay View, Fla., nursery stock; Fred. Roemer, Quedlinburg, Germany, seeds; John Goode & Co., Hyde Park, Ill., plants; Cole & Bro, Pella, Ia., seeds; E. Bonner & Co., Xenia, O., plants; W. P. Simmons & Co., Geneva, O., plants.

THE FLORIST takes this occasion to state that the letters which have appeared in our columns under the head "From our New York Correspondent," have been furnished by that well-known writer, Mrs. Fannie A. Benson.

OUR SUBSCRIPTION LIST is celebrating the New Year by making a magnificent growth. We are more than pleased to hear from all our old friends so promptly, and we thank you for the new names you send in with your own. We are gratified to say that in the last two weeks we have received fully three times as many subscriptions as in the corresponding two weeks of last year, and we thought we were remarkably well favored then. We shall endeavor to merit your approval by making still further improvements in your paper.

SUBSCRIPTIONS for the AMERICAN FLORIST may be left with any of the following:

Baltimore, R. J. Haliday.	New Orleans, H. A. Despommier.
Boston, W. J. Stewart.	Philadelphia, Edwin Lonsdale.
Buffalo, Daniel B. Long.	New York, W. S. Allen.
Cincinnati, Harry Sunderburch.	Aug. Rolker & Sons.
Cleveland, O., Mrs. E. G. Campbell.	C. B. Joosten.
Detroit, J. Breitmeyer & Sons	Pittsburgh, J. R. & A. Murdoch.
Hamilton, Ont., Webster Bros.	St. Louis, Michel Plant & Seed Co.
Harrisburg, Pa., J. Horace McFarland.	San Francisco, Thos. A. Cox & Co.
Louisville, George Thompson & Sons.	Toronto, Ont., J. A. Simmers.
	Washington, D. C., L. Schmid & Sons.

**WELCH BROS.,**  
WHOLESALE FLORISTS,

165 Tremont Street, BOSTON MASS.  
We make a specialty of shipping choice Roses and other Flowers, carefully packed, to all points in Western and Middle States.  
Return Telegram is sent immediately when it is impossible to fill your order.

**KENNICOTT BROS.,**  
WHOLESALE FLORISTS.

ALL CUT FLOWERS IN SEASON.

Write for price list. Consignments solicited.

27 Washington Street, CHICAGO.

**CUT FLOWERS FOR THE TRADE.**

CARNATIONS, VIOLETS, ROSES, SMILAX, BULBS, ETC.  
Having doubled the capacity of my houses, with steam heat in all of them, I offer a large variety.

**JOSEPH RENARD,**  
Successor to THOS. F. SEAL,  
UNIONVILLE, Chester Co., PA.  
Telegrams to West Chester, Pa. will reach me promptly, but letters should be sent to Unionville.

**Wholesale Markets.****Cut Flowers.**

BOSTON, Jan. 10.	
Roses, Teas.....	\$5.00
" " Mermetts.....	15.00
" " Perles, Niphotos.....	10.00
" " La France.....	15.00
" " Am. Beauty.....	50.00
Lilacs.....	15.00
Carnations, long.....	2.00
" " short.....	1.50
Tulips, Lily of the valley.....	4.00
Narcissus, hyacinths.....	1.00
Bouvardia.....	1.00
Violets.....	1.50
Harrisil lilacs.....	2.00
Smilax.....	15.00
Adiantums.....	1.50

NEW YORK, Jan. 10.	
Roses, Bon Silenes.....	4.00 @ 5.00
" " Papa Gontiers.....	8.00
" " Perles, Niphotos, Souva.....	6.00
" " Mermetts, Dukes, Cousins.....	12.00
" " La France.....	10.00 @ 20.00
" " Bennetts, Cooks, Brides.....	12.00
" " Am. Beauty, Puritan.....	100.00
" " Jacques.....	50.00
Mignonette.....	10.00
Smilax.....	20.00
Carnations, fancy long.....	3.00
" " short.....	2.00
Roman hyacinths.....	4.00
Lily of the valley, narcissus.....	6.00
Tulips.....	5.00
Violets.....	2.00
Lilacs, per bunch.....	2.00

CHICAGO, Jan. 11.	
Roses, Bon Silenes.....	4.00 @ 5.00
" " Perles, Niphotos.....	8.00 @ 10.00
" " Mermetts, Brides.....	12.00
" " Bennetts, Dukes.....	10.00 @ 12.00
" " La France.....	25.00
" " Am. Beauties.....	10.00
Carnations, short.....	2.00
" " long.....	1.50
" " Grace Wilder.....	15.00
Smilax.....	5.00
Lily of the valley.....	4.00
Romans, tulips, narcissus.....	2.00
Bouvardia, bell flowers.....	1.50
Violets.....	1.50
Cells.....	12.50
Adiantum.....	1.00

PHILADELPHIA, Jan. 9.	
Roses, Teas.....	\$5.00
" " Perles, Niphotos.....	10.00
" " Mermetts, Brides.....	10.00
" " Niels, La France.....	15.00
" " Bennetts.....	20.00
" " Cooks.....	25.00
" " Am. Beauties.....	1.00 @ 1.50
Carnations.....	4.00
Roman Hyacinth.....	20.00
Bouvardia.....	6.00
Smilax.....	6.00
Lily of the valley.....	1.00
Double violets.....	1.00
Single.....	.25

**SPECIALTIES FOR JANUARY.****FINE ROSES.**

LILY OF THE VALLEY.

VIOLETS, TULIPS.



CYCLOMANS, ORCHIDS.

HARRISIL LILIES.

**WM. J. STEWART,**

67 Bromfield St. BOSTON, MASS.

**CUT FLOWERS AT WHOLESALE**  
**N. F. MCCARTHY & CO.**

WHOLESALE FLORISTS,

63 Bromfield St., under Hort. Hall, Boston, Mass.

We have made large contracts with the best Rose growers about Boston to handle their entire stock this season. Our stock will consist of Papa Gontier, Bennett, Pierre Guillott, American Beauty, Mermetts, La France, Malmison, Cook, Bride, Niphotos, Perle, Niel, Anna Webb and Grace Wilder pinks, long stems; other flowers in variety. We shall have a particularly nice lot of Mermetts and Perles, so that in sending to us when you fail to get them elsewhere you will feel reasonably sure of getting them. Unknown parties must give satisfactory reference or let us send C. O. D. Write for information.

**HAMMOND & HUNTER,**

Wholesale dealers in

**Cut Flowers for Florists' Supplies**

61 West 30th Street, NEW YORK.

**CHAS. E. PENNOCK,**

WHOLESALE FLORIST,

38 So. 16th STREET,

PHILADELPHIA, PA.

Mention American Florist.

**Thos. Young, Jr., & Co.,****Wholesale Florists,**

INCORPORATED 1885,

20 W. 24th St., NEW YORK.

**W. S. ALLEN,****WHOLESALE DEALER IN CUT FLOWERS,**

36 EAST 23rd STREET, NEW YORK.

ESTABLISHED 1877.

Price List sent upon application.

**LaRoche & Stahl,****Florists & Commission Merchants**

—OF—

**CUT FLOWERS.**

1237 Chestnut Street, PHILADELPHIA.  
Consignments Solicited. Special attention paid to shipping. Mention AMERICAN FLORIST.

**C. STRAUSS & CO.**

Telephone 977-3. WASHINGTON, D. C.

Growers of and Wholesale Dealers in

**ROSES and OTHER CUT FLOWERS**

1000 Puritan Planted for coming Winter.

**GEO. MULLEN,**17 CHAPMAN PLACE, (near Parker House),  
BOSTON, MASS.**WHOLESALE AND COMMISSION DEALER IN**  
**Fresh Cut Flowers & Florists' Supplies.**

Flowers carefully packed and shipped to all points in Western and Middle States.  
Orders by Telegraph, Mail, Telephone or Express promptly attended to.

**THEO. ROEHR'S,**

WHOLESALE

**FLORIST,**

153 W. 31st St., NEW YORK.

— SPECIALTIES —

SMILAX, NARCISSUS, LILY OF THE VALLEY,  
TULIPS, ROMAN HYACINTHS, LILACS.**CURRIE BROS.,**

Growers of and Wholesale Dealers in

**CUT FLOWERS**

MILWAUKEE, WIS.

SEND FOR PRICE LIST.

**CUT FLOWERS**

The choicest Cut Flowers at lowest market rates shipped C. O. D. Telephone connection. Use A. F. Code when ordering by telegraph. For prices, etc., Address,

**J. L. DILLON,** BLOOMSBURG, PA.**M. MALSH,**

206 S. Halsted Street, CHICAGO.

WHOLESALE DEALER IN

**CUT FLOWERS,**

AND GROWERS' AGENT.

Regular shipping orders especially solicited.



## Seed Trade.

SEED TRADE ASSOCIATION.—William Meggat, president, Wethersfield, Conn.; Albert M. McCullough, secretary, Cincinnati, O.

J. W. LODI intends starting in the seed business at Lucas, Dak.

THE NORTHWESTERN SEED CO. has been organized at Aberdeen, Dak., with a capital of \$25,000.

CHICAGO.—The Michigan Lake Shore Seed Co., and the Desplaines Seed Co. have recently been incorporated, with headquarters in this city. J. D. Vandercook will open a seed store here this spring, with branch at Austin, Ill.

## The Seed Division of the Department of Agriculture.

The American people do not fully realize the importance to the nation of many of the bureaus. They are left to languish for want of funds to support them. The department of agriculture and the seed distributing bureau are hampered every year for lack of funds, and this is the most useful department of all, for it tries to help the farmers, horticulturists and stock raisers. It is a shame that senators from agricultural states and representatives sent here by farmers should refuse appropriations and sneer at the distribution of seeds. Let me explain why this department is useful. Its objects are to ascertain the capabilities of each state for the raising of certain kinds of grain, vegetables and fruits. In an interview with Mr. King, the very intelligent and shrewd superintendent of this bureau, he showed me the records kept to furnish this investigation. This report shows what grain, fruit, etc., succeeds best in Minnesota, Texas, Florida and Maine, states widely separated by climate and nature of soils. A few years more of such records, aided by the experimental stations recently established, and the farmers and gardeners of the states will not be in doubt what to plant.—*Dr. E. M. Hale, in Chicago Inter-Ocean.*

[We think the *Inter-Ocean* readers who have often received "Department Seeds" could add much to the doctor's views, but in a very different direction. The doctor has a great deal to learn.—E.D.]

## The Violet Disease.

Yes, we've got it. Well, what is it? That's what a great many are asking, and no one seems ready to tell. We are observing it closely, and are inclined to think it is a fungus and highly contagious, and that it is likely to spread over all the violet growing sections of our country. The disease seems to follow certain general laws common to epidemics among both animals and plants.

Its first appearance is unexplained. Just how it originates is unknown. Its first onset is most severe. From the original center it spreads to other localities, and so travels and flourishes long after it has spent its force in the place where it first appeared. It will doubtless die out before long or exist only in a mild form. Like instances have occurred, notably in the case of the potato rot, the peach disease on cherries. That the disease is fungoid appears from the fact that it attacks the leaves, buds, blossoms and stems that seem to be otherwise entirely healthy. A spot will ap-

pear on a leaf and immediately begin to spread as if eating its way in the healthy tissues. Where the spot is well defined there is more or less of a nucleus or raised portion. In a short time the leaf attacked turns yellow and a rapid decay is often present.

That it is contagious is indicated by the fact that in our violet house some young healthy pansies, planted in the same bench with some violets that were diseased, became infected, and a little later some calendulas close by also became infected with what appeared to be precisely the same thing. The conditions favorable for developing ordinary mold seem to be just the conditions that favor the disease.

Careful and thorough removal of all infected parts, a low temperature, abundance of air and slight watering seem to hold the disease in check. We are waiting to see if this treatment will result in a cure. We think it will, if thoroughly done.

We are situated on Long Island about thirty miles east of New York, and in certain states of the atmosphere, with the wind in the right direction, can plainly discern the odors of the oil factories located in or near the city. Just as these odors are brought, so may the germs of the violet disease be brought from the same vicinity where the disease has been very severe.

H. T. FUNNELL.

Huntington, N. Y.

## Water Cresses.

Mr. M. A. Vigueau writes: Since 1867 I grow water cresses in a different way than the usual, and this is how I came to do it. When I lived at St. James, the owner of the grounds proceeded to level them, and in filling up the hollows, the contractor fetched amongst other rubbish a lot of kitchen refuse amongst which I noticed the pickings of water cresses. Imagine my surprise when I found a few days after, that the cresses had started into growth and showed a lively vegetation. I concluded to try at once growing them on a border with northern exposure. My success surpassed my expectations, as I obtained magnificent cress. Proceed in the following way if you wish to try:

After preparing your soil well, heap it up liberally, then border the edges with planks, so that 2-inches of plank show above your bed; fill this space with well-rotted manure going into mould, and soak your bed thoroughly. Set your cuttings four inches apart and water liberally on warm days. Usually one watering a day will keep the plants perfect. I use the cresses as bought in the markets, have the tops for my meal and plant the lower ends. To be quite frank, however, cress thus raised is a trifle less tender and the leaf not quite as large as of that grown at the brookside; still not every one has a brook on his place who is fond of cresses and who will gladly accept of my mode of culture.—*Translated from Lyon Horticole by A. R.*

ST. CATHARINES, ONT.—Jas. Dunlop has rebuilt four houses 66 x 16. Thos. Holder & Son expect to open a seed store in the spring. They have remodelled three of their houses 100 x 18 each, and will devote more space to roses and carnations for cut flowers.

## Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1887.

Jan. 16.—Tem., morning 27°, noon 34°, evening 28°. Wind NE. Sunday.

17—Tem. 14, 11, 2. NW. Potted rooted cuttings of Mt. of Snow geraniums. Repaired lath shades. Finished pricking out in boxes seedling pansies. Cleaned and spread geraniums in No. 4.

18—Tem. 13, 4, 3. NW. to SW. Continued repairing lath shades. Potted rooted cuttings of Mt. of Snow geraniums, *Achyranthes metallica* and *A. Lindenii*. Nipped and thinned foliage of young geraniums.

19—Tem. 20, 30, 31. SW. Potted rooted cuttings of variegated alyssum in rose pots—two in each pot. Put in bench cuttings of a variety of begonias. Thinned foliage of *Mad. Salleroni* geraniums.

20—Tem. 31, 44, 31. SW. to W. Continued repairing lath shades. Put in cuttings of *salvias* and *gnaphaliums*. Nipped young plants of *Achyranthes Lindenii*.

21—Tem. 10, 32, 35. Finished repairing lath shades. Propagated othonnas. Topped *achyranthes* and rose geraniums.

22—Tem. 48, 42, 43. SW. to N. Put in cuttings of *Begonia Saundersonii*, *B. semperflorens alba nana*, *libonias* and *Cuphea platycentra*. Cleaned *alternantheras*.

23—Tem. 35, 34, 32. N. to NW. Sunday.

24—Tem. 21, 34, 38. NW. to S. Commenced repotting young geraniums into 3-inch pots. Cleaned *alternantheras* in No. 3.

25—Tem. 36, 34, 31. W. to N. Continued repotting young geraniums into 3 inch pots. Pricked out in boxes seedlings of *Cineraria candidissima*. Cleaned *alternantheras* in No. 3.

26—Tem. 10, 25, 20. WNW. to SW. Same as yesterday and rearranged plants in No. 1.

27—Tem. 28, 38, 38. S. Continued repotting geraniums. Pricked in boxes seedlings of *Verbena hybrida*. Placed well-advanced *hyacinthus* on bench with an inverted pot over each.

28—Tem. 43, 45, 35. S. to W. Continued repotting geraniums. Pricked in boxes seedling stocks. Trimmed young plants of *Thymus argentea*.

29—Tem. 27, 43, 40. SW. Same as yesterday.

30—Tem. 12, 0, 2. NW. Sunday.

31—Tem. 0, 23, 18. NW. to NE. Continued repotting young geraniums. Made another sowing of *Verbena venosa*.

CINCINNATI.—Now that roses are so scarce, carnation parties are popular. A decoration for a mantel arranged by Huntsman contained six dozen plants—ferns and palms; not a flower was visible. The effect was striking. A Christmas tree made up entirely of *hyacinths* was a novelty of R. A. Kelly's creation. It was four feet in height, and bunches of roses and tulips were used to represent trinkets in its decoration. The base, covered with ice plant, had a snowy appearance. Violets are bringing 75 cents a dozen. Sunderbruch had the best New Year's trade of anybody. Baskets were in demand and new shapes were mostly used.



FREE To All Seed Buyers Our complete Illustrated Annual of Treated Seeds, Halbs, Tools, etc., with all about seeds and gardening. Colored Plates. A.W. LIVINGSTON'S SONS.

DO YOU WANT SEEDS

Prices low for reliable seeds. Sold last season to Thousands of Farmers and Gardeners and no complaints. We are Growers as well as Dealers. Originators of Aztec, Partridge and DECATI Tomatoes, &c. Box 141 Columbus, O.





**TRY DREER'S  
GARDEN SEEDS**  
Plants, Bulbs, and  
Requisites. They are the  
best at the lowest prices.  
TRADE LIST issued  
quarterly mailed free.  
**HENRY A. DREER,**  
Philadelphia

**MELON SEEDS** 14c. to 40c. per pound.  
Send for PRICE LIST.  
Odiella, Black Spanish, Kohn Gem, Dark Telo, Iron  
Clad, Pride of Georgia, Hackensack, Bird, Golden  
Gem, Banana. **FREEMAN HURFF,** Swedesboro, N. J.

**PAPER SEED BAGS,** PLAIN OR PRINTED.  
BEST QUALITY AND  
AT LOWEST PRICES.  
Many years' experience in the Seed Business enables  
me to make Catalogue Work and Seed Bag Printing a  
Specialty. Refer to Philadelphians.  
**GEO. A. KARR,** Philadelphia, Pa.

**SIBLEY'S TESTED SEEDS**  
Catalogue Free! Containing  
all the latest novelties and stand-  
ard varieties of Garden, Field and  
Flower Seeds. Gardeners every-  
where should consult it before  
purchasing. Stocks pure and fresh; prices reasonable.  
Address: **Wm Sibley & Co.,**  
Rochester, N. Y., or Chicago, Ills.

**SALZER'S PANSIES**  
Lead the World in  
Exquisite Colorings  
and Marvelous Size.  
Angel's Robe Pansy, a  
new pure white pansy,  
for bordering and ceme-  
tery planting.  
Write for florists' and  
market gardeners whole-  
sale list.  
**JOHN A. SALZER,**  
La Crosse, Wis.

Over 6,000,000 PEOPLE USE  
**FERRY'S SEEDS**  
**D. M. FERRY & CO.**  
are admitted to be  
The LARGEST  
SEEDSMEN  
in the world.  
**D. M. FERRY & Co's**  
Illustrated, De-  
scribed Price List  
**SEED**  
**ANNUAL**  
For 1888  
Will be mailed  
FREE TO ALL  
applicants, and to  
last season's custom-  
ers without ordering it.  
Invaluable to all. Every one  
raising Garden, Field or Flower Seeds should send for it.  
Address **D. M. FERRY & CO.,** Detroit, Mich.

Our Annual,  
**YEAR'S WORK IN THE GARDEN.**  
Of everything worth growing and how to grow  
it. Ready now. SENT FREE. Write for it.  
**HARMAN & SON,** South Bend, Ind.

**A. BLANC,**  
ENGRAVER FOR



**Florists and Seedsmen.**  
LARGEST AND BEST COLLECTION OF HORTI-  
CULTURAL ELECTROS IN THE WORLD.  
Send for list of Catalogues.  
314 North 11th Street, Philadelphia.

**BURPEE'S FARM ANNUAL FOR 1888**  
Will be sent FREE to all who write for it. It is a  
Handsome Book of 128 pp., with hundreds of illus-  
trations. Colored Plates, and tell about the  
**BEST CABBAGE, FARM and FLOWER**  
Bulbs, Plants, and valuable Year Books on Garden Topics. It de-  
scribes rare Novelties in VEGETABLES and FLOWERS,  
of real value, which cannot be obtained elsewhere. Send address  
on a postal for the most complete Catalogue published, to  
**W. ATLEE BURPEE & CO., PHILADELPHIA, PA.**



**Warranted Seed.**

I have founded  
my business on  
the belief that  
the public are anxious to get their seed directly from the  
grower. Raising a large proportion of my seed enables  
me to warrant its freshness and purity, as see my Ve-  
getable and Flower Seed Catalogue for 1888, FREE  
for every son and daughter of Adam. It is  
liberally illustrated with engravings made directly  
from photographs of vegetables grown on my seed  
farms. Besides an immense variety of standard seed, you  
will find in it some valuable new vegetables not found in  
any other catalogue. As the original introducer of the  
Eclipse Beet, Burbank and Early Ohio Potatoes, Hubbard  
Squash, Deephead Cabbage, Cory Corn, and a score of other  
valuable vegetables, I invite the patronage of the public.  
**JAMES J. H. GREGORY,** Marblehead, Mass.

**PLANET JR. GARDEN DRILLS. WHEEL HOES. HORSE HOES. FIRE FLY.**  
Each one of these  
POPULAR TOOLS  
Has been either  
**REMODELED**  
**OR IMPROVED.**  
They are more com-  
plete, simple, prac-  
tical, and strong  
than you can imag-  
ine; so look them  
over carefully.  
**NEW STYLES, NEW PRICES. S. L. ALLEN & CO.,** Patentees & Mfrs. 127-129 Catharine St., Philadelphia, Pa.

**SEEDS BULBS, PLANTS,**  
SUPERIOR NORTHERN GROWN.  
**CURRIE BROS.,** 108 Wisconsin Street and 312 Broadway,  
Illustrated Catalogue Free. Milwaukee, Wis.

**New Bay State Tomato,**  
Another of our Novelties for 1888.  
A GREAT BOON FOR MARKET GARDENERS, TRUCK-  
ERS and FARMERS. A New Tomato after 15 years' selection and  
breeding from the old Trophy. A Tomato that never has been excelled  
for flavor, solidity and quality. The Bay State is free from risk, perfect  
in form, very little pulp, meaty all through, vines hardy but not  
coarse. See catalogue for full description.  
Offered in Packets only. Price postpaid, 20c. 3 packets, 50c.  
CATALOGUE READY JAN. 1st.

Every Gardener and Farmer should have it. **INSTRUCTIVE, STRIKING and BEAUTIFUL.** Send address  
at once.  
**B. L. Bragg & Co., Springfield, Mass.**

**GOLDMAN'S ATOMIZER**  
AND SPRINKLER  
FOR A THOUSAND AND  
ONE USES. COMMENT  
UNNECESSARY  
Practical  
and Useful.

For Flowers, Window Gardening,  
House Plants, Destroying Insects  
and for various other sprays. Most  
natural substitute for fog or dew.  
By dipping in water while closed,  
drips instantly. Bail then perfora-  
ted; spray controlled by pressure of  
hand. Size of lemon squeezer.  
Weight, 5 oz. Exclusive Terri-  
tory to Agents. Sells on its own  
merits; no talk. Sample by mail, 25c. This is the  
Atomizer that sold so well at the Danbury, Albany  
and other Fairs. Florists and Seedsmen, show it to  
your customers; sells fast; good profit. Excellent  
for indoor plants. Send for illustrated pamphlet  
and price to the trade. Mention this paper.  
**M. GOLDMUN,** Manufacturer, Pittsfield, Mass.

**PAPER SEED BAGS,**  
For Flower and Vegetable Seeds.  
**CLARK BROTHERS,** Manufacturers, 61 Ann St., N. Y.

**A. T. MERRICK,**  
\*HORTICULTURAL ENGRAVER\*

113 ADAMS STREET,

CHICAGO.

**B. B. NOURSE & CO.,**  
WESTBORO, - MASS.  
Manufacturers of  
**POT PLANT, GARDEN and VERANDA**  
**TRELLISES,**  
**TREE and PLANT STAKES.**

**PLANTS - SEEDS - BULBS**  
SMALL FRUITS  
WITH NOVELTIES  
C. E. ALLEN BATTLEBORO VT.

**M. M. BAYERSDORFER & CO.**  
56 N. 4th Street, Philadelphia, Pa.  
Manufacturers and Importers of

**Baskets & Florists' Supplies**  
NEW CATALOGUE READY,  
and sent free on application.

**ENGRAVING DIRECT FROM PHOTOGRAPH.**  
NO DRAWING REQUIRED.  
NO HAND WORK NECESSARY.  
**CHEAP. ARTISTIC.**  
SEND COPY TO CROSSCUP & WEST ENG. CO.  
FOR ESTIMATE 307 FILBERT ST. PHILA. PA.



## News Notes.

LITTLE ROCK, ARK.—Smeeton & Coleman is a new firm of florists at Fourteenth & Wolf streets.

SPRINGFIELD, MO.—The Springfield Floral Co. has succeeded M. & E. Hopkins. S. H. Horine is proprietor.

ANN ARBOR, MICH.—Cousins & Hall have added a small violet house 36 x 10, giving them a total of 5,500 feet of glass.

STUEBENVILLE, O.—J. Creasey has purchased the greenhouses and grounds of Q. A. Lobinger who has gone to Southern California.

MILWAUKEE.—It is reported that the contents of F. P. Dilger's new houses have been frozen through a defect in the heating apparatus.

JACKSON, MICH.—Jos. B. Blessing has finished an additional new rose house 60 x 16. Simon Verburg is completing two houses 48 x 20 and 48 x 11.

CHICAGO, ILL.—Walter N. Pike, formerly with John Lewis Childs, Floral Park, N. Y., has located here. He will grow seeds, bulbs, etc., for the trade.

LANSING, MICH.—R. Mann & Son are completing a new house 80 x 18 and a packing room 33 x 16. H. F. Dew has a fine seedling strawberry which promises well.

LOUISVILLE, KY.—Sam'l J. Thompson has withdrawn from the firm of Geo. Thompson & Sons. He will conduct the cut flower store at 261 West Jefferson street, and the old firm will continue the greenhouses, with city office at the above named number.

PEORIA, ILL.—A member of the trade in this city writes us that a local society would be of great value in harmonizing the trade, who do not now pull together. If two or three should join together and issue a postal card call for a meeting for organization we believe that the society would be forthcoming.

TOLEDO, O.—Two new houses covering a space 140 x 25 have been recently erected by John Wilson & Co. They are heated by natural gas, with a saving of twenty-five per cent. over coal. Mrs. E. Suder is heating ten houses with natural gas, and says it works admirably. J. Fischer has added a new house 50 x 12.

TORONTO, ONT.—Alex. Mearns has built a cottage and two greenhouses at 18 Maud street. The greenhouses are 64 x 16 and 16 x 10. Tidy & Son bought the business of John F. Horsley who removed to California last August. James Barber is the successor in business of the late James Fleming. He has pulled down all the old greenhouses and built in their place eleven fine new houses. Mr. Barber has leased the place for a number of years. Plumb & Son have built a new house 55 x 12. John H. Dunlop has built a new rose house 109 x 18, and two others 50 x 16 each; Tidy & Son two new houses covering a space 100 x 28, and James Page two 100 x 30 each.

DETROIT.—F. A. Ray succeeded J. G. Krumholz, florist at 259 Woodward ave. Jan. 1. Mr. John Breitmeyer has left for a three-months trip in California. B. Schroeter has completed three rose houses 90 x 18. C. F. Hogg has succeeded Jas. Hogg & Son and has built three new houses 80 x 19. F. Walz has purchased the stock and ten greenhouses of A. D. Mylius. G. H. Taepke has added four

houses, two 100 x 12 and two 100 x 20, giving him a total of 14,000 square feet of glass. Gus. Knoch is completing a new house 100 x 20 to be heated by steam. Chas. Warnke has added a new house 100 x 20. At the last meeting of the Florist Club the two subjects presented were "Mildew" and "Deadbeats." The latter subject caused a hot discussion as to the propriety of discussing it, and on ballot it was laid over till next meeting when it will be discussed. A dozen florists are already booked for the New York convention and it is expected to double this number.

DAYTON, O.—H. H. Ritter has changed from hot water to steam, and erected new houses in place of old ones, greatly increasing his facilities for cut flower grow-

ing. The Dayton Floral Co. has erected this fall two new and substantial houses 60 x 25. They intend to grow principally roses and carnations. Horlacher's range of houses are now run to their fullest capacity, and kept busy filling orders for the cemetery trade, near which they are located. E. Seitner's Main street store is gaining a good trade. Johnson's conservatory on Jefferson street, Mrs. Heath on Fifth, and F. W. Ritter, Jr. at 150 South Jefferson street, all report large holiday trade, and will be better prepared next season. F. W. Ritter, Jr. has opened a new seed and florists' furnishing store on Jefferson street. Several large structures are being erected at the National Soldiers' Home and Mr. Beck, the gardener, is preparing for an unusually fine display next season.

## FLORISTS' FLOWER SEEDS

OF NEW CROP READY.

## J. C. VAUGHAN, CHICAGO.

New Catalogue Jan. 25.

ALL LEADING STANDARD VARIETIES IN STOCK.

# THE American Florist Company's DIRECTORY

OF



{ FLORISTS,  
NURSERYMEN,  
AND SEEDSMEN,

OF THE

## UNITED STATES AND CANADA.

1887.

## PRICE ONE DOLLAR.

The most complete and accurate list yet published. The key designates the particular branch of the trade each one is engaged in. The street and number of those living in cities will insure the delivery of tons of catalogues which have hitherto remained dead in the office to which they were addressed. At this low price every one in the trade can afford to have a copy for reference. Address

## AMERICAN FLORIST CO., 54 LA SALLE ST., CHICAGO.

**AUGUST RÖLKER & SONS,**  
44 Dey St., NEW YORK,  
Supply the Trade with  
**SEEDS, BULBS,**  
And all kinds of  
**FLORISTS' SUPPLIES.**  
1888 Trade List for Seeds now ready.

**BULBS, IMMORTELLES.**  
**J. A. DE VEER,**  
(Formerly of DeVeer & Boomkamp.)

19 Broadway, New York.

SOLE AGENT FOR  
GENERAL BULB CO., Vogelenzang, (Holland.)  
Ls. BREMOND FILS, Ollioules, (France.)

Offers to the trade, net without engagement:  
Lily of the Valley (true Berlin pips), per 1,000, \$10.00.  
In original cases of 250, \$2.00. Per 100, Per 100  
Lilium Anstratum, large bulbs, \$9.00 88.00  
Excelsior Pearl Tuberoses, extra, 2.00 15.00  
Gladioli Colvili, "The Bride" 3.50 30.00  
Choice **DUTCH FORCING BULBS** yet on  
hand at greatly reduced prices:

	Per 100.	Per 1000
Mixed Hyacinths in four colors, separate, double and single,.....	\$3.00	\$25.00
Good named Hyacinths, 10 to 15 var. ....	3.50	32.00
Picked Hyacinths, 20 exhibition var. ....	9.00	80.00
Tulips, 12 fine forcing varieties, including white and yellow,.....	1.50	12.00
Tulips, 12 best varieties,.....	2.00	15.00
Duc van Thol, scarlet,.....	.75	6.00
" Fines forcing mixture, single,.....	.90	8.00
" " double.....	1.20	11.00
Narcissus in fine sorts,.....	1.75	15.00
Jonquills, single, sweet-scented,.....	1.00	9.00
" double,.....	2.00	
" Campanulæ, single,.....	1.10	10.00
Crocus, in 5 separate colors or mixed,.....	.30	2.50
Crown Imperials, finest mixed,.....	7.00	
Star of Bethlehem, fine for forcing,.....	1.75	
Iris, Spanish mixed,.....	.40	3.00
" English.....	1.00	8.00
Scillas, in sorts, white, pink, blue, etc. ....	1.50	
Aconites, single mixed,.....	.60	5.00
" double.....	.25	10.00
" Tulgens, single or double,.....	2.00	
Ranunculus, Persian mixed,.....	.60	5.00
" Turian.....	.75	
" French.....	.50	4.00

For other bulbs, grasses, cape flowers, milkweed bulbs, sea oats, pampas plumes, etc., see price list, mailed on application.

**R. VAN DER SCHOOT & SON,**  
WHOLESALE  
**BULB GROWERS,**  
HILLEGOM, HOLLAND.

**EXTRA STRONG CLEMATIS**

FROM THE

**BOSKOOP HOLLAND NURSERY ASSOCIATION**

Ready for immediate delivery.

Address **C. H. JOOSTEN,**  
Importer of Plants and Bulbs.  
3 COENTIES SLIP, NEW YORK.

**ROTTED PEAT, FIBROUS PEAT, AND PACKING MOSS,**  
\$1.00 per Barrel.

**Sphagnum Moss, \$2.00 per Bbl.**

A discount of 25 per cent, on all orders of five barrels or upwards. Cash with orders.

**THE BARNEGAT MOSS AND PEAT CO.,**  
BARNEGAT, NEW JERSEY.

**PEACH PITS**

**NURSERYMEN.** We offer the following  
Free on board cars at Philadelphia—Sacks included.  
They are put up in Sacks containing Two Bushels in measure.

Tennessee Natural, per bush, 100 lbs., \$2.00 \$1.75  
Virginia Natural, 1.75 1.50  
Southern Mixed Natural, 1.50 1.25  
Snacks, 1.50 1.25

**SAMPLES MAILED ON APPLICATION.**  
Seed and Implement Catalogue FREE  
for 1888. Now Ready, Mailed FREE

**WM. H. SMITH, SEEDSMAN,**  
1018 Market St., Philadelphia, Pa.  
P. O. Box 1510. Mention this Paper.

A CIRCULAR OF DESCRIPTION, &C., FOR OUR

New Tomato, "Volunteer,"

— AND —

New "Carnation Striped" Zinnias,

Will be sent to the trade during this month, in time to insert in Spring Catalogues.

**V. M. MALLOCK & SON,**  
**QUEENS, NEW YORK.**

**F. E. McALLISTER,**

— WHOLESALE DEALER IN —

**Seeds** For the Florist Market, Garden-er and Farmer. **Requisites** Such as Baskets, Im-mortelles, Grasses, Mosses, Boquet Pa-pers, Pampas Plumes, etc **Bulbs** For the Green-house or Gar-den.

22 Dey Street, - - - NEW YORK.

**SEGERS BROTHERS,**  
GROWERS OF  
**HOLLAND BULBS.**

OUR SPECIALTIES ARE:

Holland Hyacinths and Tulips, in any quantity; also Crocuses, Narcissus, Daffodils, Liliums, Lily of the Valley, Gladiolus The Bride, Anemones, Ranunculus, Spiræa Japonica, etc.

References as to quality of our Bulbs, etc., to several United States Florists and Seedsmen.

Send for Wholesale Catalogue.

**LISSE, NEAR HAARLEM, HOLLAND.**  
WHOLESALE ONLY. NO AGENTS.

**SEEDS, BULBS, PLANTS,**  
SUPERIOR NORTHERN GROWN.

**CURRIE BROS., SEEDSMEN AND FLORISTS,**  
Send for Catalogue. **MILWAUKEE, WIS.**

Desirable Plants for Florists.

HEALTHY! VIGOROUS! CHEAP!

Alteraontheras, Callas, Carnations, Chinese Primroses, Chrysanthemums, Coleus, Eche-verias, Geraniums, New Bedding Plants, Orchids, Pandanus, Pelargoniums, Roses, Smilax, Verbenas, &c., &c.

Send for list.

**W. T. BELL, FLORIST,**  
FRANKLIN, Pa.

**RHODODENDRONS**

Being the representatives in the U. S. for Messrs.

**Jno. Watterer & Sons,**

The great English Rhododendron growers, we are prepared to furnish Rhododendrons of all sizes and in any quantity, at prices lower than ever before offered in this country. Orders now solicited for spring delivery. Prices on application.

**B. A. ELLIOTT CO. Pittsburgh, Pa.**

**RELIABLE SEEDS FOR FLORISTS.**

**ZIRNGIEBEL'S** Improved White Aster.

— Improved White Perpetual Stock.

— Improved Giant Candytuft.

— Improved Giant Trimardeaux and Bugnot Fancy Fansies.

Trade packages of any of the above seeds, \$1.00 each.

**DENYS ZIRNGIEBEL, Needham, Mass.**

**MAILING BOXES.**

They are cheap, light, and the strongest of any in the market. Mail smashing unknown, with our boxes. Sample 15 cts. Price for less than 1,000 25c, 1,000 or more, 2c.

**ELLIS BROS., Keene, N. H.**

**FOR SALE.**  
**THE CUTS**

USED IN ILLUSTRATING THIS PAPER.

Write for prices on any which you have seen in previous issues and would like.

**AMERICAN FLORIST CO.**

**CHICAGO.**



## New York.

Asparagus plumosus nana has never before been used so freely. Growers are producing it in quantity, and it is very much preferred to A. tenuissimus.

Florists have been very busy since the New Year opened, the season of entertainments now being at its height.

The decorations for the subscription balls at Delmonico's, such as the Patriarchs' and Assemblies, are never on an elaborate scale. Those for the several large charity balls are meager, because all the money possible to save for charity is withheld. It is only the private balls given at Delmonico's and at residences where there is any abundance of blossoms used that would in the slightest degree make any unusual demand for flowers.

Mrs. H. R. Rockwell of Bronxville, N. Y., is sending in purple lilacs of superior quality. They are as large and robust as outdoor lilacs in spring time.

## Indianapolis.

The Society of Indiana Florists will hold its second regular annual meeting in this city February 22-23 next. The railroads have made a rate of one and one-third fare for the round trip on the certificate plan to members and others attending the meeting. A complete programme will be issued by the secretary in due time. An effort will be made to have a few specimen plants and cut flowers on exhibition. A good time and good attendance is assured. The meeting will be held in the rooms of the State Board of Agriculture and those of the Hort. society, the same being connected, and the last to be used for the exhibition.

The question of prices should be studied by some of our florists. With several local florists the selling price is the same the year round. Choice roses were sold at the holidays for \$1.50 a dozen, in spite of the fact that coal is advancing every month.

We can burn natural gas for fuel next season. A company has been already organized and will pipe the city next spring. The gas is of good quality.

A number of florists from this city recently paid a fraternal visit to E. G. Hill, Richmond, Ind., to inspect the improvements recently made at his place. He is now in excellent shape. The new packing room and office are arranged very conveniently. Still further improvements will be made next season. You are always royally welcomed at Gurney's.

The Pennsylvania R. R. has now two good greenhouses at Richmond, Ind., under charge of A. N. Hoffman to supply plants for beautifying the section from Indianapolis to Columbus and Logansport.

There is a prospect that the city council will make some arrangements to beautify our now desolate parks and squares.

Chas. Reiman has been quite ill but is out again.

Anthony Weigand was laid up for some time, but is around again and is as jolly as ever.

Several teachers of the public schools held receptions in their class rooms at the close of the term and gave their pupils holly branches and small bunches of flowers.

## Daily Record of Work Done.

Your timely note that this a good time to commence a diary of work done, reminds me of the time when I first began to keep such a diary, fifteen years ago.

Since then I have kept a daily record of all work done, repairs, propagation, dates of seed sowing, planting of stock, etc., and when I found that I had planted or sown too early or too late I made a note of it. Its value to me in deciding upon future operations can not be estimated. Fellow florist or gardener, if you do not already keep such a diary, try it now. Just after tea is a good time to write it up each day.

Westfield, N. J.

W. B. WOODRUFF.

## Uses of Boys.

First Omaha florist—Young De Pink is a slow payer, isn't he?

Second florist—Last week he paid up the big bill he owed me and made all sorts of apologies; said he'd forgotten all about it.

"Eh? Did you sue?"

"No; the last time he ordered a bouquet sent to his girl I made out an itemized bill for the past three years, giving the address each bouquet went to."

"Yes."

"Well, the boy made a mistake and delivered the bouquet to De Pink and the bill to the girl."—*Omaha World.*

WASHINGTON.—The parties who recently opened a new floral store here under the title of "The Rose and the Lily" have, we hear, removed to Portland, Me. The place was closed here about two weeks before Christmas.

## NEW CHRYSANTHEMUMS

It is now generally acknowledged that

I have distributed most of the best new Chrysanthemums of recent introduction.

I again offer fourteen new varieties of merit, quite distinct from any kinds now in cultivation, as well as all

BEST OLDER KINDS.

List ready January 10th.

## H. WATERER,

IMPORTER OF PLANTS AND BULBS,  
56 North 38th Street, PHILADELPHIA, PA.

Rooted Cuttings of leading sorts Celcius, strong and clean..... per 100, \$ 1.25  
swanley White Violets..... " 75  
Vine major var., two plants in 3-in. pot..... " 6.00  
Tuberose Bulbs, 3-in. diam. and over, per 1,000, 10.00  
" 5-in. to 4-in. diam. " 8.00  
" sets, clean..... per bu. 3.00  
JOHN CURWEN, JR., Villa Nova, Pa.

# THE AMERICAN FLORIST COMPANY'S :: DIRECTORY :: OF FLORISTS, NURSERYMEN AND SEEDSMEN OF THE UNITED STATES AND CANADA. 1887. PRICE ONE DOLLAR.

The most complete and accurate list yet published. The key designates the particular branch of the trade each one is engaged in. The street and number of those living in cities will insure the delivery of tons of catalogues which have hitherto remained dead in the office to which they were addressed. At this low price every one in the trade can afford to have a copy for reference. Address

## AMERICAN FLORIST CO.

54 LA SALLE ST., CHICAGO.

## PRIMULA OBCONICA.

One of the most important novelties of recent years; invaluable to florists for cutting; well grown plants will have as many as 100 spikes of bloom at one time. Very fragrant; a continuous bloomer, and easily raised from seed. Per 1,000 seeds, \$5.00; per 100 seeds, 65c.

## CYCLAMEN GIGANTEUM—Breck's Perfection.

Our celebrated strain of the Giant Cyclamen is unsurpassed for size of bloom, form, substance, and variety of color. Includes all the finest shades from the purest white through the different gradations of blush, pink, lilac, and crimson, to the deepest blood red; also whites with crimson eye and selfs, deepening towards the base. The finest strain in cultivation. Per 1,000 seeds, \$15.00; per 100 seeds, \$2.00; per 100 seeds, 50c.

## FLORISTS' CHOICE FLOWER SEEDS A SPECIALTY.

	PKT.	OZ.
ASTER, Boston Market, white.....	15	\$ 4.00
Princess of Wales, scarlet.....	5	50
BALSAM, Covent Garden, white.....	55	75
PANSY, Breck's Imperial Price.....	25	10.00
STOCK, Boston Market, white.....	15	5.00

## Send for Catalogue.

Everything for Farm, Garden and Lawn.

## CHOICE FLOWER SEEDS A SPECIALTY

## JOSEPH BRECK & SONS.

Established 1822.

BOSTON, MASS. U. S. A.

Our Motto, "ELECTISSIMA ET VILLISSIMA" (The Best at the Lowest.)

## GROWTAGE'S PATENT BUILDING FOR HORTICULTURE



— GLAZED WITHOUT PUTTY. —  
Endorsed by the New York Horticultural Society.  
Illustrated Circular mailed on application.  
Plans and estimates given for every description of Horticultural Buildings.

H. J. GROWTAGE,  
76 Myrtle Avenue, BROOKLYN, N. Y.



### Florist's Letters

Patent applied for.  
These letters are made of the best iron mortelles, wired on wood or metal frames with holes to insert toolbooks.

**Prices on Wood Frames:**  
2-in. Purple..... per 100 \$5.00  
Less than 100, 35c  
2 1/2-in. Purple..... per 100 \$4.00  
Send for sample. Postage 10c. per 100. Script lettering in Metal Frames any word, be, per letter.

**Designs, Monograms, etc.**  
W. C. KIRCH,  
1107 Broadway, Brooklyn, N. Y.  
J. C. VARGAS, Chicago,  
Agt. west of Pennsylvania—  
Mention American Florist.

**VERBENAS.**

Our Stock is perfectly healthy and vigorous.

Gen'l Collection, stock plants, 40 fine sorts	Per 100, \$3.00; \$25.00
" " rooted cuttings 40 "	1.00; 8.00
Mammoth Set, " "	1.25; 10.00
Coleus, " " fine collection, 125;	10.00
Geraniums, double and single, 3-in. pots, 4.00;	35.00
Veitchii, 3-in. pots, strong plants,	\$8.00 to \$8.00 per 100.
Quatrefoil, 3-in. pots, strong plants,	\$8.00 per 100.

**Ampelopsis**

I. C. WOOD &amp; BRO., Fishkill, N. Y.

**VERBENAS**

— A SPECIALTY. —

Largest and best stock in the country now ready. Free from all disease.

— MAMMOTH SET. —

Also some of the best old sorts.

50,000 MAMMOTH WHITE.

Safe delivery guaranteed. Special rates for large orders. Add. 10c. per \$100 worth if sent by mail.

From pots, .....	Per 100 \$3.00	Per 1000 \$25.00
Transplanted on benches, .....	1.25	10.00
Strong rooted cuttings, .....	1.00	8.00

SEND FOR SAMPLE.

WM. DESMOND,

KEWANEE, HENRY CO., ILL.

**Mammoth Verbenas, &c.**

30 Var. Verbenas, from 2-inch pots, .....	Per 100 \$2.00
" " Geraniums, .....	2.50
25 " Coleus, including J. Goode, .....	2.50
Feverfew, The Gem, .....	1.00
Petunias, best set double, .....	3.00

ADOLPH HIEHLE, Parkersburg, W. Va.

100,000

**VERBENAS.**

THE CHOICEST OLD AND NEW VARIETIES.

Fine pot plants, .....	\$2.50 per 100; \$20.00 per 1,000
Rooted cuttings, .....	1.00 8.00

No REST OR MILDW. —

Packed light, and Satisfaction Guaranteed.

J. L. DILLON, Bloomsburg, Pa.

**FOR SALE.**

VERBENAS, clean and thrifty, .....	Per 100 \$2.50
Rooted Cuttings, .....	per 100 \$2.00; 1.00

Orders for spring delivery booked now.

JOSEPH E. BONSALL, Salem, Ohio.

**THE BEST AND CHEAPEST  
DOUBLE PETUNIA SEED**

(P. hybrida grandiflora fl. pl.)

In the market. For sale to the trade by the grower.

G. A. McTAVISH,

NORTH SAANICH, B. C., CANADA.

**GLADIOLUS.**

Mixed and Choice Named Varieties, by the dozen or thousand.

Send for prices; also for Wholesale Price List of

ORNAMENTAL NURSERY STOCK.

SAMUEL C. MOON,

Wholesale Nurseryman and Gladiolus Grower,  
MORRISVILLE, BUCKS CO., PA.**FOR WESTERN FLORISTS.**

VERBENAS, from 2½-inch pots, including	Per 100 \$2.00
Mammoth, .....	2.50
GERANIUMS, best test varieties, .....	2.50
5,000 ASA GRAY Geraniums, .....	2.50
3,000 GRANT " .....	2.50

5,000 Rose Geraniums, will include a good proportion Dr. Livingstone .....

COLEUS, 30 best varieties, .....

FINE PREMIUM PANSIES, very strong 3.00

DOUBLE PETUNIAS, .....

Large stock of most all varieties of plants strong and healthy. SEND FOR TRADE LIST.

Address N. S. GRIFFITH,

JACKSON CO. INDEPENDENCE, MO.

(Independence is well located for shipping, being 8 miles east of Kansas City.)

**MAMMOTH VERBENA SEED**

We have succeeded in growing SEED of this splendid strain which we now offer for the first time. We guarantee the seed to be the TRUE MAMMOTH Variety of selected colors.

Trade pkt. 50c; ¼-oz. \$2.00; per oz. ....	\$6.00
Verbena, Dreer's Choicest Strain, pkt, 50c; oz. . .	4.00
SMILAX. New Crop. Per ounce . . . . .	1.50
Centaurea Gymnocarpa. New Crop. 1,000 Seeds .	.60
Candissima. " " " " " " " " " " " "	.75

Wholesale Price List of Flower Seeds ready in December, will be mailed all applicants in the trade.

HENRY A. DREER, SEEDSMAN AND FLORIST,

PHILADELPHIA.

**NEW WHITE CARNATIONS,**

WM. SWAYNE AND L. L. LAMBORN.

The two best white carnations ever offered. EARLY, FREE AND CONTINUOUS BLOOMERS. Stock of these excellent sorts will be ready March 1st, 1888. Orders booked now, and filled strictly in rotation as received. Price, \$25.00 per 100.

Send for Cut and Descriptive List.

Wholesale price list of rooted cuttings of other leading sorts ready Jan. 1st.

WILLIAM SWAYNE, Kennett Square, Pa.

**NEW ROSES, NEW COLEUS,  
NEW VERBENAS**

And a choice selection of other Plants. Write for a copy of New Wholesale Catalogue.

NANZ &amp; NEUNER,

LOUISVILLE, KY.

**CINERARIAS.**

Choice Hybrid, strong plants from 2½-inch pots, at \$5.00 per hundred.

L. J. DENTON, PLAINFIELD, N. J.

**TABACCO STEMS FOR FLORISTS,**

ADDRESS

FOR SALE, packed in bales 200 to 250 lbs.

No CHARGE for delivering to depots.

PRICE:

From \$8 to \$10 per ton, according to quantities.

P. C. FULWEILER,  
716 Arch Street, PHILADELPHIA, PA.

Mention American Florist.

**BOUVARDIA**

Strong roots for propagating.

In five varieties, at, .....	Per 100 \$5.00
ENGLISH IVIES from 4-in. pots, bushy, .....	8.00
Roses, American Beauty 3-in. pots, fine plants, ..	9.00
ROSEMARY, from 5-in. and 6-in. pots, .....	15.00
CRUCIFIGLO RECURVATA, from 4-in. pots, 10.00	
EPHYLLIUMS, 4-in. and 5-in. pots, per doz. 1.75	
AMARYLLIS BULBS, started, 2 var., " " " " " " " " " " " "	.50
DOUBLE PEARL BLOOMING TUBEROSE BULBS, .....	per 100, \$1.50; per 1,000, \$8.50.

ADDRESS

A. R. REINEMAN &amp; BRO.,

39 Fifth Avenue, PITTSBURGH, PA.

**SPECIAL LIST.**

Carnations, Hinze's White, 2-inch pots, .....	Per 100 \$2.00
Geraniums, dble. and sig., 10 var., 2½-in. pots, ..	2.50
Roses, American Beauty 3-inch pots, .....	3.00
" Camoens, Perles, Souv. d'un Ami, 3-in. " " "	6.00
S. de St. Pierre, The Bride, Sunset, .....	6.00
Coleus, 24 varieties, .....	3.00
Feverfew, Little Gem, .....	2.50
Hedera variegata, 2 feet, .....	4.00
10,000 Roses, asst., 2-inch pots, .....	per 1,000, \$25.00; 3.00

A. GIDDINGS, DANVILLE ILL.

We have Fine Strong Plants of the following to offer to the trade:

Ageratum, 2½-inch, .....	Per 100 \$4.00
Cinerarias, 4-inch, .....	5.00
Calla Lilies, 4-inch, .....	8.00
Rose Geraniums, 3-inch, .....	2.50
D. Alyssum, 2-inch, .....	2.00
Begonia Metallica, 2½-inch, .....	4.00
Geraniums in var., 3-inch, .....	1.00
J. W. DUDLEY & SON, PARKERSBURG, W. VA.	

**GERANIUMS.**

Twenty of the best varieties for bedding or market purposes, at \$5.00 per hundred, \$40 per thousand.

VERBENAS.

Twelve best and most distinct varieties, \$3.00 per hundred; \$25.00 per thousand. Rooted cuttings \$7.00 per thousand. Fine strong plants of

Alternanthera par. major, Ampelopsis Veitchii, Myrtus Multiflora, Myrtus Communis, and Smilax.

Prices given on application.

HOLZNAGLE &amp; NOEL,

Whitewood P. O., Mich., (near Detroit.)

Mention American Florist.



SOLD BY SEEDSMEN.

100,000

Well Rooted Cuttings of Verbenas and Carnations. VERBENAS. The very best selected from the

Market, sent also by the best of the leading older varieties.

CARNATIONS. The new Lyons Whites, pure white and good winter bloomer. My own raising, very prolific and early, also about 15 of the older and best leading varieties.

Send for circular and price list and convince yourself how cheap you can buy good strong and healthy plants of the above.

FRED SCHNEIDER,

WHOLESALE FLORIST,

ATTICA, Wyoming Co., N. Y.

**GARDEN, FIELD AND FLOWER SEEDS.**

Market Gardeners' and Florists' Seeds a Specialty.

**GARDEN TOOLS, SEEDERS, ETC.**

SEND FOR LIST OF FLORISTS SEEDS.

JAMES KING,

170 Lake St., CHICAGO, ILL.

We offer a Few Hundred of

**CLEMATIS FLAMULA,**

Strong plants, two years, at \$10.00, Cash.

J. H. CAMPBELL &amp; SONS,

3601 Germantown Ave., PHILADELPHIA, PA



## The Education of Gardeners.

We have been much interested in several articles which appeared lately in the AM. FLORIST on the education of gardeners. In some of these articles regrets are expressed that so few possess a knowledge of those branches of science now considered indispensable to the full equipment of the intelligent horticulturist.

This is not the time to say anything against a higher education than has hitherto prevailed, but how this is to be brought about does not clearly appear. One cause, however, for this want, seems due to the fact that a large proportion of those in the business spring from that class in society which have not the means to keep their boys at school long enough to acquire a technical education—the upshot of which is that those of them who lack the ambition to make good in some measure at least this defect, continue through life in a state of comparative ignorance regarding what science teaches in relation to the various branches of their business. The fortunate few can enjoy the privilege of becoming learned in all the wisdom of the schools, but we question if very many of those who enjoy these advantages will be willing to labor "working with their hands" at such work as falls to the lot of young gardeners. One thing at least may be set down as true, that theirs is no calling for an inordinate display of gold studs and sleeve buttons. But notwithstanding the drawbacks the lack of education entails, those of them who have the true horticultural ring, and who are willing to take advantage of the many facilities for self-culture now open to the most, if not all, may rise to a point of intelligence worthily fitting them for the best positions in the land either as gardeners or florists.

We doubt not but many of the ablest gardeners have had this experience, and the signs of the times foreshadow no condition of society in which men more highly educated will be in greater demand than they are now, with environments proportionate to their deserts. We say this in the belief that the increase of intelligent workmen will depend upon the inducements held out by their patrons; which is equal to saying that the demand will govern the supply, and the demand must emanate from their patrons, who are to be found in every walk of life. And just in proportion to the development of culture in those will the call increase for the better education of gardeners and florists.

A. VEITCH.  
New Haven, Conn.

## LILY OF THE VALLEY.

Headquarters for best forcing pips.

— FOR PRICES, ADDRESS —

AUGUST RÖLKER & SONS,

P. O. BOX 899, NEW YORK.

Mention American Florist.

NEW MONTHLY CARNATION  
"ELMONT."

This new Crimson Carnation is a most vigorous grower, of compact habit; not curled like *Crimson King*, an exceedingly free bloomer, and the flowers are large, fringed, and of a rich crimson color, clove-scented, and retaining their brightness until they are entirely withered. Calyx small, does not burst. Received First Premium for "Best New Seedling," New York Hort. Society, Nov. 1887.

NEW STRIPED CARNATION  
"VOLUNTEER."

Large white, flower fringed, striped with rose, upright and compact grower; clove fragrance, and free bloomer; undoubtedly the best striped carnation yet offered.

For prices, etc., send for full descriptive circular to

CHAS. KRICK,

1107 Broadway, BROOKLYN, N. Y.

## CARNATIONS.

ROOTED CUTTINGS will be furnished to the

trade as usual in season.

FLORISTS at all times in quantity.

Send for price list.

JOSEPH RENARD,

Successor to THOS. F. SEAL,

UNIONVILLE, Chester Co., PA.

CARNATIONS.  
ROOTED CUTTINGS OF

Edwards, Scarlet Gem, Philadelphia Red, Crimson King, Snowdon, etc. \$1.25 per 100; \$10.00 per 1,000. Portia, Duke of Orange, Chester Bride, etc. \$1.50 per 100; \$12.50 per 1,000.

PLANTS ready March 15th at double the above rates. Pips if desired at one-half these rates. Many other new and desirable sorts. Send for price list and descriptions. Niagara Grape Vines \$15 per 100. W. R. SHELMIER, Avondale, Chester Co., Pa.

NOVEMBER STRUCK  
NOW CARNATIONS READY

Alcagiere, Hinz's White, Rosalind, Grace Wilder, Snowdon, Springfield, and Hinsdale, \$2 per 100. Andalusia, \$5.00 per hundred.

Prompt attention given to Cash Orders.

H. B. CHITTY,

Faterson, New Jersey.

## NEW CARNATIONS.

Orders booked for the two best whites

Wm. SWAYNE, L. L. LAMBORN,

devered after March 1st, '88. \$25.00 per 100.

CUTTINGS.—Hinz's, Henderson and Snowdon,

for \$1.50 per 100; \$10.00 per 1,000.

Send for price list and leading Carnations.

LEROY L. LAMBORN,

ALLIANCE, Stark Co., Ohio.

## \* TO THE TRADE \*

200,000 ROSES FOR SALE.

Fine lot of Geraniums for bedding and marketable purposes, at \$5 per 100.

— VERBENAS —

20 vars., embracing all the leading sorts.

— FERNS —

A fine lot of 4-inch Adiantum concinnum latum, at \$10.00 per 100.

PTERIS TREMULA, 2½-in., \$4 per 100.

" ARGYREA, " \$6 "

GEO. W. MILLER,

WRIGHT'S GROVE, CHICAGO.

DWARF DOUBLE PEARL  
TUBEROSE BULBS.

We have a large stock of well-ripened large Bulbs, at the following low prices to the trade: Extra large, 5-in. & upwards, \$2 per 100, \$15 per 1,000. Large, 4-in. & upwards, \$1.75 per 100, \$15.00 per 1,000. Medium, 3-in. & upwards, \$1.50 per 100, \$10 per 1,000. Small, for stock planting, from 2½ inches and over, \$1 per 100. Pips, for planting, 50 per bushel.

## CHOICE FLOWER SEEDS.

Centauria, Cadiassubia, etc. per 100. Centaurea, Cymocentra, etc. per 1,000. Fancy, superb strains of self and fancy colored vars., mixed, 80 per oz. Phlox, Drummondiana, once half dwarf var., \$1.50 per oz. Phlox, Drummondiana compacta, bright colors mixed, best for roots, \$1 per oz. Smilax, new crop, \$1.50 per oz. Verbenas, hybrid, extra choice mixed vars., \$3 per oz. Florists and Market Gardeners' complete line of choice Seeds, Bulbs and Implements on hand, at moderate prices. Wholesale Price List and Seed Catalogue for 1888 mailed to all applicants. Mention this paper.

WM. H. SMITH, Seedman,  
Lock box 150 1018 Market St., Philadelphia.

## SURPLUS VERBENAS.

Fine stock as ever; 1 saw; clean and full of cuttings; well assorted; a rare chance. \$2.00 per 100.

Address W. B. WOODRUFF, Florist,  
Westfield, N. J.



## WINTER BLOOMING AZALEAS.

Winter Blooming Lilacs, &c.

GABRIEL MARC,

WOODSIDE, L. I., N. Y.

# NEW SEEDLING CARNATION

## WHITE GEM.

The finest Pure White Carnation ever offered the trade. Early, continuous and free bloomer, never bursting its calyx.

Awarded a First-Class Certificate of Merit by the Mass. Hort. Society, Nov. 27th, 1887, for Excellence.

Strong plants, well-rooted, ready about March 15th, '88, at \$15.00 per hundred; \$2.00 per dozen.

ORDERS BOOKED NOW, AND FILLED IN STRICT ROTATION.

Circular giving full information ready now. SEND FOR ONE.

GEO. E. BUXTON,  
Nashua, N. H.

PATTEN & CO.,  
Lowell, Mass.





## Cleaning Flues—A New Use for Cats.

Cats are very useful around greenhouses in keeping them free from the ravages of rats and mice, but we have an additional recommendation for puss, that enlarges considerably the sphere of her usefulness. This we discovered several years ago when we heated our greenhouses by flues.

As every one who has had experience with them know, they work splendidly if kept clean. Unfortunately however this is not easily done, and proves the greatest objection to them. To keep a flue in good working order, the soot must be removed several times during a severe winter; and to do this thoroughly the top of the flue must be removed and the soot taken out by scraping and dipping; or, else openings made at intervals and a swab (usually of a coffee-sack filled with hay) thrust through by means of a pole. This is the method we used, till one day looking around for a way out of our sooty troubles, the thought occurred to us of sending pussy through with a cord attached to her leg, which accomplished we could draw the sack of hay through by the cord. The opening at the far end of the flue was enlarged, the cord tied to her foot and she placed in the opening near the furnace. There was some ruffled fur, scratching, lusty mewing, and a tail of enormous proportions; but the opening was closed over her. For a moment she waited, then as if the opening at the farther end had been decided to be the only hope, she started through, drawing the cord after her. At the far end I welcomed her with a pan of milk previously ordered, loosened the cord from her foot, drew the sack of hay through and the job was done. We were much pleased with our experiment, and the discovery of a new use for cats quite as useful as catching mice. Soon she became accustomed to the task and had only to be placed at the opening in the flue, when as if comprehending what was wanted she would proceed right through.

Puss was released from the anxieties of this life long ago; but her children were readily trained to the work. Long since, we discarded flues for steam heating, thus freeing puss and her companions from their useful duties in this line. We still have one flue, however, and the great-great-grandchild of the puss of long ago, cheerfully performs what she seems to regard as one of the unavoidable demands of life, if not one of the most useful employments of her race. E. W.

## SOMETHING NEW.

OUR 3-PIECE BOX  
FOR FLORISTS AND NURSERYMEN.

Which is the pride of the Florists.  
ALSO LOCK CORNER BOXES OF ALL SIZES.  
Sample and price list free.

SMITH & SMITH,  
KENTON, Hardin Co., OHIO.

## SYRACUSE POTTERY.

Thumbs.....\$2.54 (Special) 3 in. 4 in. 4 1/2 in. .... 7 91  
2 1/2 in. .... 3.05 3 in. .... 4.78 3 1/2 in. .... 10.85  
2 3/4 in. .... 3.87 3 3/4 in. .... 86 20 5 in. .... 33 75  
Above prices per 1,000, delivered from our cups.  
We ship all over the U. S. Free samples with first order. Order a trial crate. If you send check add 10c. exchange. Send for list of rates and list of prices at which we pack to order assorted sizes in a crate, and for list of 1 ready packed crates. Notice that we sell at the above prices only in

## READY PACKED CRATES

Shipped at buyer's risk and freight; each with order.  
PRICES BY THE CRATE: 1,500 Thumbs, \$8.00;  
2,025 2 1/2 in. .... 8.80; 1,000 4 in. .... 8.45;  
1,875 2 3/4 in. .... 7.25; 390 3 1/2 in. .... 3.00;  
1,300 special 3 in. .... 6.00; 220 5 in. .... 4.40;  
1,150 3 1/2 in. .... 5.50; 100 6 in. .... 3.50;  
875 3 3/4 in. .... 5.50; 1,200 No. 3 Rose, .... 7.00.

J. N. PERKINS, Manager, Syracuse, N. Y.



FOR THE TRADE.  
**FLORAL WIRE DESIGNS.**  
JAS. GRIFFITH,  
THE PIONEER MANUFACTURER IN THE WEST,  
305 Main Street, CINCINNATI, OHIO.  
SEND FOR WHOLESALE PRICE LIST.



## Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

## GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

Mention American Florist.

L. Wolff Mfg. Co., 93 to 111 W. Lake St. CHICAGO

Mention American Florist.

## GURNEY'S NEW HOT WATER HEATER.

THE CHEAPEST AND BEST FOR

Greenhouses, Conservatories and  
DWELLING HOUSES.

THE GURNEY HEATERS present more water surface to the direct action of the fire than any others (known to us) in use. They are the easiest to keep clean, and with due attention almost any kind of fuel may be used.

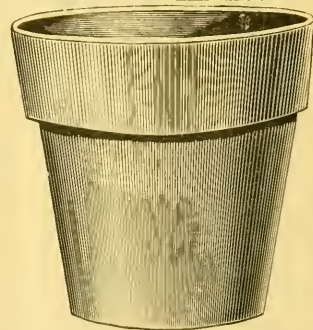
EASILY REGULATED.

SIMPLE AND EFFICIENT  
SAFE AND ECONOMICAL.

Manufactured by the  
GURNEY HOT WATER HEATER CO.,  
237 FRANKLIN STREET, BOSTON, MASS.

JOHN A. FISH, Managing Director.  
SEND FOR PAMPHLET AND PRICE LIST.

SELLING AGENCIES.—M. H. Johnson, 140 Center Street, New York. Rice & Whitacre Manfg. Co., 42 and 44 W. Monroe Street, Chicago (West and Southwest). T. H. Chase, 51 Edmund Place, Detroit, Mich. (for Michigan and Ohio). Wm. Gardner & Co., Portland, Oregon.



THE  
WHILLDIN POTTERY COMPANY,

713 and 715 Wharton St.,

PHILADELPHIA, PA.

— USE —

The Improved Rim Pot,

AND SAVE ONE-HALF THE BREAKAGE.

Send for Illustrated Price List.

Samples, with sizes marked sent on application.

HAND TURNED POTS  
From HILFINGER BROS.' POTTERY,  
FORT EDWARD, N. Y.  
PRICES PER HUNDRED.

2 in. 40c., 2 1/2 in. 50c., 3 in. 60c., 3 1/2 in. 80c., 4 in. 90c., 5 in. \$1.25,  
6 in. \$2.20, 7 in. \$4.00, 8 in. \$5.00, 9 in. \$8.50, 10 in. \$11.50,  
12 in. \$22.50, 14 in. \$30.00. Cylinders for Cut Flowers,  
10 x 8 1/2, 20 10 x 8 1/2 50 per doz. We pack in casks which  
are very strong. No charge for packing. Our pots  
are well burnt and strong. TRUSTS CASH. Address  
HILFINGER BROS., Fort Edward, N. Y.

## HALES' MOLE TRAP

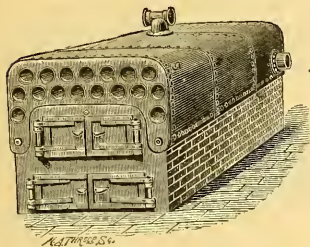
For destroying ground moles in lawns, parks, gardens and cemeteries. The only PERFECT mole trap in existence. Guaranteed to catch moles where all other traps fail! Sold by seedmen, Agricultural Implement and Hardware dealers, or sent by express on receipt at \$2.00 by H. W. HALES, RIDGEWOOD N. J.

ESTABLISHED 1854.

**Devine's Boiler Works**

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers.



Capacity from 350 to 10,000 feet of four-inch pipe.  
Send for New List.

**PETER DEVINE,**

387 S. CANAL ST.,

CHICAGO.

ESTABLISHED, 1866.

Floral Wire Designs,

Manufactured by

**N. STEFFENS,**

335 East 21st Street. - NEW YORK.

**Conservatories**

GREENHOUSES, ETC.

Erected in any part of the U. S. or Canada  
Glazed on the

Helliwell Pat. Imperishable System

OR WITH PUTTY.

For further testimonials, illustrated catalogue or estimates address

**JOSEPHUS PLENTY.**  
HORTICULTURAL AND SKYLIGHT WORKS.

Offices, 244 Pearl Street, NEW YORK.

**GREENHOUSE HEATING.**

BY A. B. FOWLER.

Explains fully all the best systems of heating greenhouses by both hot water and low-pressure steam. Tells you the points to consider in selecting an apparatus. How to adjust same to various locations gives the results of the latest scientific experiments. Shows how to compute the number of feet of pipe required for a given space; draft and other important matters.  
It is highly commended by Mr. John Thorpe and others. Postpaid, 75c.

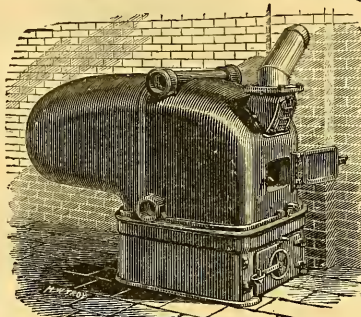
Sent on receipt of price. Address,  
**AMERICAN FLORIST,**  
CHICAGO.

Delegates to the next THE  
convention will travel Pullman Car Line  
via the TO AND FROM

**MONON ROUTE.**

LOUISVILLE, INDIANAPOLIS, CINCINNATI, AND THE WINTER RESORTS OF FLORIDA AND THE SOUTH. For full information address

E. O. McCormick, Gen. Passenger Ag't, Chicago.

**Greenhouse Heating AND Ventilating**

Send 4 cents postage for Illustrated Catalogue.

**HITCHINGS & CO.**

233 Mercer Street, New York.

Five Patterns of Boilers,  
Eighteen Sizes,  
Corrugated Fire Box Boilers  
Saddle Boilers,  
Conical Boilers,  
Base Burning Water Heaters  
Perfect Sash Raising Apparatus.

**FLORISTS' PRICE LIST FOR 1888,**

FROM

WILLIAM MECHWART,

**Terra Cotta Works,**

143 to 147 LIBERTY STREET

CHICAGO, ILL.



2	inch Pots,	per 1,000 (2 1/4-in. wide by 2 1/2-in. high)	\$3.50
2	Rose Pots,	2 1/4-in. " 2 1/2-in. "	4.00
2 1/2	" Pots,	" " " " "	4.00
3	" "	" " " " "	6.50
3	" "	3 1/4-in. " 3 1/4-in. "	8.00
4	" "	4 1/4-in. " 4 1/4-in. "	10.00
4	" "	4 1/2-in. " 4 1/2-in. "	11.00
5	inch—	per 1,000, \$18.00	per 100,
6	" "	" " " "	20.00
6	" "	" " " "	30.00
7	" "	" " " "	40.00
7	" "	" " " "	50.00



## Index to Advertisers.

Advertising Rates, etc.	257
Allen, C. E.	261
Allen, S. L. & Co.	261
Allen, W. S.	259
Barnhart Moss & Peat Co.	263
Bayersdorfer, M. M. & Co.	261
Bell, W. T.	263
Bernard, E. Jr.	267
Berg, Albert.	267
Berger, H. H. & Co.	267
Blanc, A.	261
Bonsall, Jos. E.	265
Boyson, Jas. L.	267
Brackbridge & Co.	267
Bragg, B. L. & Co.	261
Bruck, Jos. & Sons.	261
Burpee, W. A. & Co.	261
Buxton, Geo. E.	265
Campbell, J. H. & Sons.	267
Carmody, J. H.	270
Chitty, H. E.	265
Clark Bros.	261
Crossen & West Eng. Co.	261
Currie Bros.	259, 261, 263
Cutler, John Jr.	264
Denton, L. J.	265
Desmond, Wm.	265
De Veer, J. A.	265
Derling, Peter.	269
Dez, John L. & Co.	269
Dillon, J. L.	259, 265
Dreer, H. A.	261, 265
Dudley, J. W. & Son.	265
Elliott, B. A. Co.	265
Ellis Bros.	265
Exeter Mach. Wks.	270
Fassett, F. E. & Bro.	267
Ferry, D. M. & Co.	261
Finck & Co.	267
Fraser & Lippincott.	267
Frederick, P. C.	265
Giddings, A.	265
Goldman, M.	261
Grogory, Jas. J. H.	261
Griffith, Jas.	268
Griffith, N. S.	265
Growth, Henry J.	264
Gurney Heater Co.	268
Hales, H. W.	268
Hallack, V. H. & Son.	268
Hammond & Hunter.	269
Hammond, Ben.	265
Hannan & Son.	261
Harold, Thos. G.	267
Herr, Albert M.	267
Hieble, Ad.	265
Hickey, Henry G.	267
Hillinger Bros.	267
Hill & Co.	267
Hitchins & Co.	269
Holmsted & N. Co.	269
Hooker, H. M.	270
Huff, Freeman.	261
Ives, J. H.	269
Jewett, Z. K.	267
Joosten, C. H.	263
Kerr, Geo. A.	261
Kennecott Bros.	269

E. S. MILLER of Wading River, I. I., is now with John Lewis Childs.

PRINCETON, ILL.—At the meeting of the Illinois State Hort. society Dec. 27, the proceedings were unusually interesting. The following officers were elected for the ensuing year: President, Milo Bernard, Kankakee; vice-president, H. M. Dunlap, Savoy; secretary, A. C. Hammond, Warsaw; treasurer, H. K. Vickroy, Normal. Place of next meeting, Alton.

## SOMETHING NEW

— IN —

Heating Apparatus

— FOR —

GREENHOUSES.

Send for Illustrated Catalogue.

J. D. CARMODY,

EVANSVILLE, IND.

PIPE AND FITTINGS FURNISHED

— TO —

PLANS AND SPECIFICATIONS.

Contracts solicited for

HEATING GREENHOUSES.

Most Improved plans.

ALL WORK GUARANTEED.

Best Prices furnished on application.

E. A. STIMSON &amp; CO.,

No. 22 and 24 Sears Street,

DAYTON, OHIO.



Sectional View.



Scollay's Valvular Plant Sprinkler.

ALSO THE IMPROVED PUTTY BULB,  
FOR GLAZING GREENHOUSES, ETC.

None sold at retail. Buy from your Seedsmen.

PATENT HOT WATER BOILERS.  
For Greenhouses, Poultry Houses, Etc., Etc.

JOHN A. SCOLLAY,

74 and 76 Myrtle Ave., Brooklyn, N. Y.



## Improved Hot Water Boilers

For Heating

Greenhouses, Graperies,

CONSERVATORIES, ETC.

ALSO

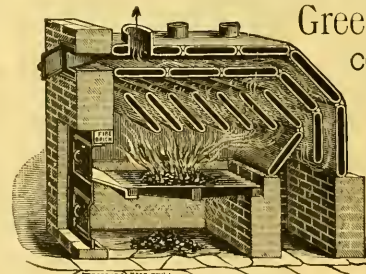
Cast Iron Pipe, Fittings, Valves and  
all Material for Heating by  
Hot Water.

Send for Catalogue.

MYERS &amp; CO.

1173 So. 9th St.,

PHILADELPHIA.



## GREENHOUSE HEATING

BY STEAM, BY HOT WATER, BY COMBINATION STEAM AND WATER.

EXETER MACHINE WORKS,  
19 FEDERAL ST., BOSTON, MASS. WORKS—EXETER, N. H.THE CELEBRATED  
WILKS WATER HEATER!For Heating  
GREENHOUSES,  
DWELLINGS,  
POULTRY HOUSES,  
STORES, BATH TUBS,  
ETC., ETC.

Send for Price List.

S. Wilks Mfg. Co.,

Cor. Monroe &amp; Clinton Sts., Chicago.



ALL SIZES OF SINGLE AND DOUBLE THICK

GLASS FOR GREENHOUSES.

ALL GLAZIERS' SUPPLIES.

Write for Latest Prices.

# THE AMERICAN FLORIST



*America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."*

Vol. III.

CHICAGO AND NEW YORK, FEBRUARY 1, 1888.

No. 60.

## THE AMERICAN FLORIST

Copyright, 1887, by American Florist Company.  
Entered as Second-class Mail matter.  
Published on the 1st and 15th of each month by  
**THE AMERICAN FLORIST COMPANY.**  
GENERAL OFFICES, 54 La Salle Street, Chicago.  
EASTERN OFFICE,  
Room 81, Vanderbilt Building, New York.

All communications should be addressed to the  
general office at Chicago.

SOCIETY OF AMERICAN FLORISTS.—E. G. Hill, Richmond, Ind., president; John N. May, Summit, N. J., vice-president; M. A. Hunt, Terre Haute, Ind., treasurer; Wm. J. Stewart, 67 Bromfield street, Boston, Mass., secretary. The fourth annual meeting at New York, Aug. 17, 18, 19, 1888.

**THE EXECUTIVE COMMITTEE MEETING.**—At the meeting of the committee in New York city, Jan. 17, every member was present, for the first time since the formation of the society. During the two days' session the committee kept constantly at work until the arrangement of the programme was complete, and if the essayists as selected execute the work laid out, the New York convention next August will be the most interesting and instructive one yet held by the society. A large number of questions have already been received, the discussions on which cannot but be of great interest to every member. At the banquet given the committee by the New York Florist Club, on the evening of the 18th, fifty members of the society were present, including a number of visiting florists from Philadelphia, and a very pleasant evening was spent. President Hill was very warmly received; he expressed his pleasure at meeting so many representatives of the metropolis. Ex-president Craig followed and outlined the good work the society has already accomplished for the entire trade, and said that the outlook for the future was very bright. Mr. Thorpe entertained the company with some very humorous remarks, and Mr. Kift of Philadelphia gave a New York version of his "Sash" song which brought down the house. Mr. Craig sang "Annie Laurie" with effect, and Messrs. Henderson, Elliott and Cowan also contributed to the entertainment of those present.

PHILADELPHIA, Dec. 25.—Robert Craig is reported very ill with pneumonia. He contracted a severe cold on a trip to Washington shortly before the meeting of the executive committee in New York, and at the latter city it was aggravated by exposure during a sleigh ride. He returned home from the meeting a very sick man, the doctors pronouncing the case a serious one. Every reader will, we know, be pained to read this announcement. We hope to report an improvement soon.

### New York Notes and Comments.

A very handsome wedding decoration was arranged by Siebrecht & Wadley at Delmonico's on the 11th. The red parlors, in which the ceremony took place, showed the chief arrangement in flowers. At the extreme end, in front of the mantelpiece, was a graceful elliptic arch of flowers, the keystone being in white, with the monogram "E. L." in red carnations and violets. The arch was chiefly composed of tulips, hyacinths, violets and lilac, here and there thrown out by callas. The bell, pendant from the arch, was of Mermets, Niphotos and white lilac, with a handsome spray of cattleyas in the front. The long floral bell-rope was carelessly caught across the damask-covered stand which stood under the arch. At either side of the arch, filling up the end of the room, was an exquisite group of plants, chiefly palms, with a large specimen cybotium in the center. There was some slight decoration on the mantel at the back, but this was almost entirely concealed by the arch. This grouping at the end of the suite of rooms was wonderfully effective, being arranged with special regard to the rich bright coloring of the apartment. The mirrors were draped with smilax and hanging bunches of roses and other flowers. In the archway between the rooms was a draping supporting a hanging ball of red carnations, feathered with Roman hyacinths. In corners and wall spaces were palms; tall oreodoxas showed to great advantage spreading their graceful leaves from behind some of the pieces of furniture. This palm often appears too "leggy" for general use in decorating, but it shows off to great advantage under such circumstances.

At the head of the stairs was a well-arranged screen of plants hiding the entrance to the large ball-room, where supper was served. In this room the decorations were confined to foliage; palms and orange trees were grouped in the corners, while the mirrors were veiled with cape smilax and further adorned with masses of palm-leaf-leaves, southern pine and English holly. This cape smilax, like a good many other plants distinguished by that geographical adjective, does not hail from any particular cape; it is a wild smilax from the Southern States—probably *S. laurifolia*, as that is an evergreen. It is very popular now for garlanding. Certainly our florists are doing a good deal for the South in the way of clearing out the woods and thickets. The only ribbon used in this decoration was that forming an aisle for the entry of the bridal party.

Mr. John Thorpe has bought a place at Pearl River, New York, formerly belonging to Mr. Hanft, where he will begin business with the good wishes of a large circle of friends.

The Florists' Club tendered a dinner to the executive committee of the S. A. F., during their recent session in New York. The festivities—for it certainly was a joyous occasion—took place at Morello's on Jan. 18. That it was a very enjoyable occasion, enlivened by speeches both wise and witty, no one will doubt. The only regret expressed by the New Yorkers was that their guests were so limited in the matter of time.

At the January meeting of the Florists' Club, after the question of this entertainment was settled and sundry financial matters were debated, Mr. C. L. Allen read his paper on "Plant Physiology." It was such a valuable companion to Mr. Taylor's paper, read at the last meeting, that the two will be printed together. There was just enough difference of opinion relative to some of the views expressed by Mr. Allen to make an entertaining discussion. Mr. Peter Henderson spoke from a thoroughly practical standpoint, and there were remarks from Mr. May, Mr. Thorpe and others. Judging from past meetings, our club is going in for the reasons of things in a tremendously scientific manner.

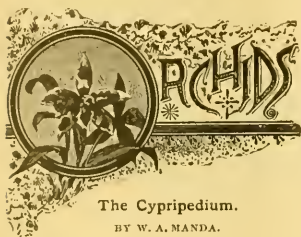
Various schemes are afloat in readiness for the next national convention; any novelties in the way of entertainment are already promised. What we all want to see is a fine exhibition of horticultural novelties and rarities. At former conventions we have been more indebted to dealers in florists' supplies than to growers for the display made.

At the annual election of officers for the New York Horticultural Society there was very little change made. There was a decided disposition on the part of the many to desert the old society for the Florists' club, which has in some respects superseded it. It seems in many ways rather hard to say where the Horticultural society ends and the Florists' Club begins, since all lovers of horticulture are permitted to join both organizations. But when we think of the fine shows it has given, and the fine shows it may give yet, a good many among us will hate to give up the old society.

One ingenious grower has been trying a boiler which burns coal dust, but so far it does not seem a tremendous success, as the blower sends a lot of noxious gas into the houses. Yet there is no reason why a steam heating greenhouse boiler should not be arranged on this principle, like the "dirt-eating" engines on the Reading road. They require a large heating surface and a strong draught. In many railway repair shops they use dust-consuming boilers with a jet of steam turning in under the flues to promote draught. Florists are likely to welcome anything that will lessen the cost of fuel, which becomes a more expensive item every year with a great many.

EMILY LOUISE TAPLIN.





The Cyripedium.

BY W. A. MANDA.

IX.

Coming as they do from different countries, elevations and exposures, cyripediums need therefore various amounts of sunlight. For some kinds the sun is really necessary to make them flower freely. A caule, although difficult to keep for a number of years, will do well in either a sunny or shaded place. *C. pubescens*, *C. parviflorum*, *C. candidum*, *C. calceolus*, *C. montanum* and *C. fasciculatum* require considerable sun; while *C. spectabile*, *C. japonicum*, *C. guttatum*, *C. arietinum* and *C. macranthum* are sensitive under the direct rays of the sun. An exception in this class is the *C. irapeanum*, which delights in the full sunlight the whole year round.

The evergreen section should be divided into two classes. Those that require rather a shady nook in the house are *C. Argus*, *C. barbatum* and its varieties, *C. callosum*, *C. ciliolare*, *C. Curtisii*, *C. Dayanum*, *C. Fairieanum*, *C. Hookeri*, *C. Bullenianum*, *C. Javanicum*, *C. Lawrenceanum*, *C. Petri*, *C. Pitcherianum*, *C. purpuratum*, *C. superbiens*, *C. Tonsum* and *C. venustum*. This means shaded against the direct sun, but otherwise much light cannot be given them. In the other class we may put *C. Boxallii*, *C. concolor* and varieties, *C. Druryi*, *C. Godefroye*, *C. Haynaldianum*, *C. hirsutissimum*, *C. insigne* and all its numerous varieties, *C. Kimballianum*, *C. Lowii*, *C. niveum*, *C. Parishii*, *C. Philippiense*, *C. præstans*, *C. Rochelenii*, *C. Sanderianum*, *C. Spicerianum*, *C. Stonei* and *C. villosum*. All of these will stand the sun well, provided there is a good ventilation, and I have found that the shy blooming *C. hirsutissimum* will stand as much sun as any cattleya or dendrobe, and will flower freely only when treated thus. No doubt many other kinds would do the same thing, and there is yet a big field for experimenting in this direction.

In the selenipedium section we have also a slight variation as regards the amount of sun required by the different kinds. *S. Schlimii*, *S. Roelzii* and *S. caricinum* require a little more shading than *S. caudatum* and its varieties, *S. Hartwegii*, *S. Lindleyanum*, *S. longifolium*, *S. Wallisii*, *S. vittatum* and *Uropedium Lindeni*. The hybrids of any section may be treated intermediate, according to requirements of their parents, but always allow rather more sunshine than less.

## PLANTS IN FLOWER.

*Cyripedium venustum*. Wall. Ne-paul.—Roots thick and downy; leaves six or seven inches long and one and three-quarters broad, thick, coriaceous, dark green mottled with black green, the under side is covered with purplish streaks; scape six inches long, purplish, beset with short down; bract one inch long, green streaked with purple; ovary two inches long, narrow, grooved, of a green color. The upper sepal is straight, pointed, one and a half inches long and

one and a quarter inches broad, whitish, with dark green stripes; lower sepal one and a quarter inches long and only three-quarters broad, of the same color and markings as the upper one; petals horizontal, over two inches long and nearly three-quarters broad, green on the outside, bright green on the inside changing to purple towards the ends, beset with irregular black warts and spots—about a dozen on each—and the edge is beset with long hairs; lip one and one-half inches long and nearly one broad; roundish, retuse, of a purplish color, traversed by prominent dark green veins; staminode horseshoe-shaped, broadly open, green with brown markings.

This is the oldest known tropical cyriped, having been introduced in the year 1816, through the energy of Wallich. Although so many years have elapsed since its introduction, it is not seen too often in cultivation. Being a winter bloomer, it is very useful, as the flowers last quite a long time. The plant is worth growing for the foliage alone. Potted in rough, fibrous peat and moss, and kept in the average temperature of 55° F., there will be no trouble in growing it to perfection, and being easily procurable it should be in every collection.

*Cyripedium Crossianum*. Plan. and Broug. *C. insigne* x. *venustum*.—Roots thick and downy; leaves oblong, eight inches long by one and three-quarters wide, glaucous, light green, indistinctly mottled with darker green, the lower part of the under side is speckled with dark purple, while the rest is glaucous; scape eight inches high, dark purple, downy; bract one and a half inches long, green, streaked with dark purple; ovary two inches long, nearly triangular, broad, dark-colored; upper sepal two inches long by one and a half wide, green, the upper part nearly pure white, with dark green veins and brown spots up to the middle; lower sepal one and three-quarter inches long and one wide, light green with darker veins; petals two and a half inches long and nearly three-quarters wide, horizontal, purplish, with darker veins and few brown spots, the edges are beset with short hairs; lip nearly two inches long and over an inch broad at the widest part, getting narrower toward the end, light purple, with prominent veins; staminode green, horseshoe-shaped.

This hybrid was obtained by Mr. Cross, after whom it was named. It is a free-growing plant and well deserves a place in any select collection. It is intermediate between its parents and requires the same treatment as either *C. venustum* or *insigne*.

*Selenipedium Roelzii*. Reich. f. New Grenada. (Syn. *Cyripedium Roelzii*, *Cyripedium longifolium*, var. *Roelzii*.)—Roots rather thin, many matted; the base stocky; leaves loriform, eighteen inches to two feet long and one and three-quarter inches broad, light green, with still lighter shade on the under side, keeled, smooth, slightly arching; scape stout, smooth, one to three feet high, branching, of a light green color; bracts three to four inches long, narrow, green; ovary two and three-quarter inches long, narrow, nearly round, green; upper sepal bent, pointed, two and a half inches long by three-quarters wide, the sides folded back, whitish, shaded with rose and traversed by deep rose veins; lower sepal two inches long by one and a quarter broad, the sides bent inward, of the same but darker color than the upper one; petals somewhat declining, four and a half inches long and only one-quarter

inch broad at the widest part, twice twisted, green with white edge passing immediately into dark rose and purple toward the ends; lip over two inches long and uniformly three-quarters broad, green, shaded with light bronzy color and spotted on the inside; staminode broadly deltoid, green, with black bristles on the upper edge, and traversed by a slight groove through the middle.

This beautiful plant was discovered and introduced by my esteemed countryman, B. Roelz, to whom we are indebted for the discovery of so many beautiful plants, especially orchids, and it justly bears the name of the discoverer, who found it growing along the banks of the Rio-Dagua, in New Grenada, in the year 1871. In this country it has been wrongly classed as a mere variety of *S. longifolium*, which it resembles somewhat, yet it is very distinct. It differs from *S. longifolium* in being caulescent, having a smooth stem, rose-colored flowers which are different in shape, and last but most important, a distinct staminode. It is superior in beauty to *S. longifolium* on account of its bright color. The flowers continue to appear for six to ten months, so a good strong plant may be had in flower nearly all the time. It should be grown in the warmest house, partly shaded, in good fibrous peat, sphagnum and potsheds, and being a free rooter, ample pot room should be given. This plant requires a good supply of water and syringing in good weather.

Botanic Gardens, Cambridge, Mass.

[In a letter dated Dec. 13, 1887, Mr. Wm. Court, the well-known representative of Messrs. James Veitch & Sons, writes as follows: "In one of your former articles you mention *Cyripedium Tautzianum* as discarded. I do not know if it is discarded by Americans, but I can say that it is not so in England. We have had it in flower during the past ten days very fine. It is also sought after by all cyripedium growers here."—W. A. M.]

## A Bench of Cyripedium Insigne in Bloom.

This group shows a batch of *C. insigne*, bearing about two thousand flowers. They consist principally of the old insignes with about twenty different varieties of that well-known species. The best amongst them are *C. aspersum*, *amcenum*, *albo-marginatum*, *Chantini*, *Kimballianum*, *Maulei*, *hierarchyphicum*, *Violaceum platysepalum* and *Mooreianum*. They differ from the old form in the dorsal sepal having a broad band of white on the upper portion, being heavily spotted with purple and brown on the lower sections. They are very much more beautiful than the old insignes, (the price also) but for general florists' business the original form will always be in demand being such a fine bold flower.

These plants were grown in an intermediate house, with air on night and day, all through summer months, which makes them grow very sturdy, and flower more profusely than if grown with the other cyripediums in a warm stove.

GEO. SAVAGE.

Rochester, N. Y., Dec. 24, '87.

## Cyripediums in Bloom.

The cyripedium house is now rich with the bloom of more than half a hundred varieties of this deservedly popular family. *Spicerianum* and the old *insigne*, of course, are in quantity. These two





A BENCH OF *CYPRIPEDIUM INSIGNE* IN THE CONSERVATORIES OF MR. WM. S. KIMBALL, ROCHESTER, N. Y.

being probably the most useful for cut flowers, and among a dozen varieties of *insigne* at present open, the palm must certainly be given to *Punctatum violaceum* (Chantinii) and *Albo marginatum*, as being the finest and most distinct. More than half of the species in flower are hybrids, and the queen among these is a plant of *Morganiae*, with two spikes and six flowers. Too much cannot be said in praise of this grand species, its

value being greatly enhanced by an extremely free-growing quality. A near relation of this species is the handsome *Euryandrum*, but this one does not flower so freely. From the charming little *Fairieanum* we have two hybrids open—*Arthurianum*, of the *insigne* type, and *vexillarium*, of the *barbatum*. *Nitens* is a grand hybrid combining the best qualities of two grand old species—*insigne* and *villosum*. Of the *venustum-barba-*

*tum* cross there are some good representatives. *Politum* is probably the handsomest; *meirax* is very pretty but smaller (we have two flowers on a scape). *Chloronenron*, *melanophallum* and *calophyllum* all betray their parentage and are characteristically named. Of the many varieties of *Harrisianum*, *superbum* is a long way ahead. The same may be said of the majus variety of *selligerum*. The combination of *insigne* and *barba-*



tum has produced a fine hybrid in Ashburtonia, and this is improved in the variety expansum, which somewhat resembles *cananthum*. *Leeanum superbum* comes of a good stock and may be found to be even better than its parents. Grande is a splendid species and may be placed with *Morgania*, though representing a totally different type. *Schlimmii* and its pale variety are in flower, and its progeny may be seen in Sedan and the charming *candidulum*, and also, though farther removed, in *calurum*. *Dominiannum* is a very useful variety, being seldom out of bloom. *Tosum* bears quite a large flower and appears to be a self-colored form of *superbium*. *Argus* will soon be open in quantity; a hybrid of this may be seen in Io. Some fine forms of *Lowii* are open, also its near relation, *Haynaldianum*. A fine variety of *Bulnesia* with fourteen scapes, the majority twin flowers, is worthy of mention. A great improvement on *Hookeri* is the hybrid *marmorophyllum*. Many more varieties are promising well for flower, extending the flower season well into the spring months and rendering this genus the most attractive and interesting of the large collection. F. GOLDRING.

Albany, N. Y.



At Philadelphia.

Like many of my class who are imbued with a desire to learn from others' experiences or to compare our success with others, it was my pleasure to take advantage of an opportunity to visit my friend Burton at Chestnut Hill. I found friend Burton at home, and after a pleasant chat we strolled through the houses, making comments and discussing different features of interest.

Upon a front bench was a fine lot of *Coutiers* which I noticed—as with my own—have a tendency to shed the lower leaves. I attribute this to the continued dull weather and moderate temperature outside, which necessarily prevents strong firing. It is well known that with a low outside temperature and bright days, fungoid growth or mildew disappears with careful airing and firing. A moderate heat at all times—say 58°—is the best condition for roses. In dull weather it is better to reduce a little than to increase.

*Perles* looked well with a good crop coming on. In fact, everything looked well and showed good culture.

I am of the opinion that *Bennett*—for the first part of the season, at least—is best on good strong growing tea stock, such as *Souvenir d'un Ami*; later it is best on its own roots. Possibly good strong early rooted plants would obviate the necessity for working it.

A good many growers look at the *Puritan* with a curious eye. It certainly has shown a bad habit, but is not more guilty than others of its class. It behaved well with me, with the exception of black spot, until after Thanksgiving; then the blooms came imperfect and the petals would damp off, but at this writing I feel encouraged and would not condemn it for the world. It's a good rose

and will make many friends. I believe it will be like *Ami*. Beauty—better the second year.

The *Bride* is still a great favorite and will bear comparison.

*La France* seems at its best in heavy clay soil. My neighbor Smith of Doylestown prides himself on his geological location; he grows the best *La France* I ever saw. No doubt the soil has a great deal to do with it.

*Princess Beatrice* has behaved very imprudently with me, but will give it another trial on its own roots. Would like to hear of its conduct with others.

*Meteor* has done well with me; though rather slow, I can recommend it. Like its partner the *Puritan*, it is impatient of too much moisture at the roots.

I would like to tell you of friend *Lonsdale's* houses and their contents, but will wait till some other time.

THOMAS FOULDS.

### Red Spider and "Bull Heads."

At no time of the year is it more necessary to attend closely to syringing than at the present. The fires have to be kept going not only at night but frequently through the day; and unless means are taken to counteract the excessive dryness of the atmosphere caused by this continued heating of the pipes, red spider will soon cover all those plants which are liable to its ravages. For this work especially, a careful man is needed. One who will take pains to syringe every leaf. How often have those in charge of a number of rose houses been vexed to find some corner where the spider has been allowed to go unchecked, proving at once the neglect of the man who uses the hose. Spider can always be kept down by the proper use of the hose, and any florist that permits it to make headway among his plants, at once displays his incompetence or indolence. To know how much water to use in syringing is a knowledge that can only be gained by experience. There must be enough to effect the purpose of keeping the leaves clean, but not so much that the bed will become saturated and sour. In this respect every man must be his own teacher.

At this season great complaint is made by rose growers regarding the *Perle*, whose flowers instead of opening in a perfect state, often have their petals distorted, forming what are commonly known as "bull-heads." Miss *Taplin* informs us that the defect arises from a weakened constitution receiving more food than it can well assimilate. No doubt most growers will agree that there is such a thing as over-feeding. But if this disease or defect is caused solely by over-feeding, a reduction of food should supply the remedy. This has been tried without any appreciable result.

A noted rose grower of Boston told the writer that he was never troubled by "bull-heads"; and upon inquiring the reason, was informed that it was owing to the stock upon which he was accustomed to bud his *Perles*. I do not feel warranted in giving the name of this stock. If the gentleman in question wishes to impart the information to the hosts of interested florists, the pages of the *FLORIST* are undoubtedly open for his communication.

One question on this subject is worthy of an answer. Why is it that we have no "bull-heads" during the spring, summer and fall months? Only when the cold and dark days of winter approach do we notice these badly formed flowers. Is the cause owing to the low temperature

in which many are accustomed to keep their roses at night? It has been our custom to maintain the temperature in which our *Perles* are grown as near 58° and 60° at night, as possible, never, except upon a very cold night, allowing it to fall below the minimum figure, and although it cannot be said that we are never troubled with defective *Perles*, yet such flowers are, with us, the exception. Albany. ALFRED E. WHITTLE.

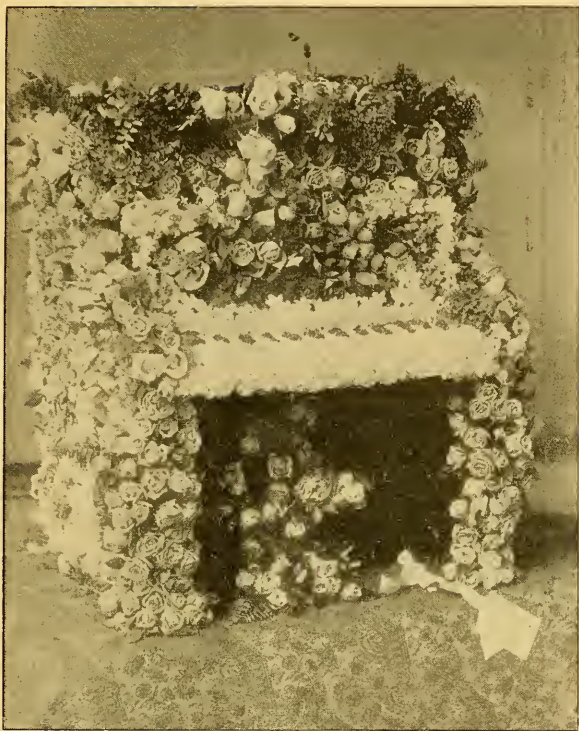
### Rose Bugs.

S. asks (p. 252) if any one can tell him of any means of destroying these pests other than cleaning the house out and replanting. During several years that I lived in Madison, N. J., I tried every remedy which I could think of and all that were suggested to me, but without the least effect on the grubs in the soil; even when dosed strong enough to kill the plants, the grub would be found still alive and apparently uninjured. To show more clearly the tenacity with which they cling to life, I will describe one thorough test I made: In the winter of 1875 I selected fifty plants in pots which were badly affected with the pest at the root, corked the drainage holes of the pots up tight, put half a pint of kerosene into two gallons of water, filled part of the pots up full of this mixture. I then mixed half a pint of turpentine in two gallons of water, and filled other pots in the same way; for the balance of the fifty pots I used one ounce of Florence oil to two gallons of water. They were allowed to stand twenty-four hours undisturbed, and stood nearly 200 feet from one end of the house. The next morning on entering the house at that end a very strong odor of turpentine and kerosene was perceptible. The plants, of course, were all dead many hours before, but on emptying the solutions out of the pots and then turning the soil out, the grubs were apparently uninjured, and to convince myself I took some from the soil where each solution had been used, kept them separate, put them into a little clean soil, and on examination some hours later they appeared to be just as lively as ever, though they had been virtually submerged in these solutions for twenty-four hours.

After that I decided that it was only labor lost to try to kill them in the grub form, and that picking of the bugs by hand was the only remedy. By studying their habits, etc., and persistent hunting, they can be kept down so that they do but little damage; but to thoroughly clean a house of them, it should be cleared out and every bit of loose dirt swept up clean, and the whole carted away as far as possible from the green-houses. All that can be burned should be at once, and new clean soil put in, and the houses planted with plants that have been grown in a house where there are no bugs. J. N. MAY.

### Forcing the Niel for Winter Bloom.

In answer to inquiry in a recent number of the *FLORIST* in regard to forcing *M. Niel* for winter flowers, I would say: A house eleven feet wide and with not much head room would not be very suitable for that purpose, as *M. Niel* is a strong grower and needs plenty of room. My advice would be, in a house of that kind, to confine the plant to a large pot or box set on the stage over the hot water pipes. You will then have the ad-



FLORAL PIANO.

vantage of bottom heat, a very necessary thing in the winter blooming of such a large rose as the Niel. I have excellent success with it, and to succeed, the following conditions are necessary: Take good strong budded or grafted plants in spring; I prefer those worked on *W. Banksia*. Box or pot them in rough turfy loam, with a little manure and sand (they won't object to a little bone dust). Drain them well, set in a good airy spot in the greenhouse. Syringe often, shade slightly, and keep soil well stirred; this will induce a strong, vigorous growth, which keep tied up till growth stops naturally in fall, then withhold water somewhat and syringing, till the wood is well ripened, say latter end of October or beginning of November, when the plants should be pruned well, say one half or more of the canes or wood taken off.

If you want early bloom, remove to a warmer house and start gradually, increasing heat and moisture and as much sunlight as possible, or the buds won't open well; it needs a high temperature when coming in bloom, as the buds are liable to blast in too low a temperature.

F.

The Marechal Niel.

BY I. H. SLOCOMBE.

On page 228 of No. 58 F. T. seeks information as to the best way to grow the Marechal Niel rose in a small house.

I have just such a house as F. T. describes, 35 x 13, running north and south, boiler at the north end, where twelve feet is partitioned off for propagating or keeping a few plants that require a little extra heat. Three years ago I dug out about two wheelbarrows full of soil, replacing it with good turf and manure well rotted and mixed together, and planted a thrifty young Marechal that I had budded on *Solfaterre* the year before. It soon ran the length of the house, when I put up three wires over the path, not allowing the rose to interfere with the plants on the benches. During the summer it grew freely and bore a few buds. Ten weeks before Christmas I pruned and tied in as many canes as I had room for, kept the house close and warm, syringing the canes twice a day for two or three weeks. They broke freely their whole length, and I then gave plenty of air to insure a good crop of buds; almost every growth had one or more buds. On Dec. 22 I cut seventy-five, and up to date have cut 400 with 132 not yet ready for the knife. The roots are supplied with water by keeping the path wet, but the leaves require frequent syringing to keep the red spider away.

This is only a makeshift sort of a way to grow the Marechal, and I hope those with more suitable houses will be able to give still better results.

New Haven, Conn.

### How to Exterminate the Rose Grub.

In response to the query in the last issue of the *FLORIST*, I venture to give a method which proved efficacious with me. After many trials with lime, Paris green, London purple, fir-tree oil and tobacco soap without results, I tried hand-picking, which was somewhat more effective but altogether too tedious.

I finally procured some chickens, placed them in a coop in the rose houses until they became familiar with the place and the hands employed in the houses, and then turned them loose. As a result, the grub was completely "bounced." The chickens not only got away with the grubs, but cleaned out several other species of insect pests. After the first few days they did not bother us by walking on the pot plants on the side benches, or flying about, but settled down and confined operations to the rose benches and the space below them. Do not remove the chickens from the house at night, for they get in their best work during the early morning hours. I believe that if chickens were allowed an occasional ramble through rose houses, we would hear less of trouble with the grub.

R. B.

### Can't Propagate Hybrids.

Will some brother florist tell me why my *H. P.* rose cuttings die in the bench—especially the Jacks? After they have formed a fine, healthy callous—indeed, begun to throw out roots, and are almost ready to pot—they begin to die by the hundreds, while the teas in the same bench and in the same sand, root with a loss of only one in fifty. The sand is of the best and kept reasonably moist with a gentle bottom heat. I attend to the bench personally.

E. A. H.

ROSES IN FIVE INCHES OF SOIL.—Just at this time I find on comparison that roses planted in five inches of soil do not do as well as those in four or even three and one-half inches. Although on a slanting bench facing south and well drained, they do not in these dark days dry out often enough. Some green mold appears in spite of all care in watering and cleaning over the soil. Give me strong plants, well established with three or four inches of soil and feed them freely, and success is assured.

HARRY CHAAPEL.

COMTESSE DE FRIGNEUSE.—This rose, from which so much has been expected for winter forcing, is worthless for the purpose, so far as I have tried it. No treatment we can give it will make it produce even as good buds as *Isabella Sprunt*. I have had it growing in an average temperature of 50° at night, at 55° and at 60°, and in neither case is it at all satisfactory.

J. N. M.

### A Floral Piano.

A floral piano is the very unique design used here recently at the funeral of Mr. Jacob Gross, for many years superintendent of the Stieff piano factory; it was a tribute from the employees of the works, and was designed by Halliday. The piece stood about four feet high and was built proportionately throughout. The base, or lower portion of the piano consisted entirely of Marechal Niel roses; the keyboard was of white carnations and Marie Louise violets; the body being made up of maidenhair ferns, *Niphetos*, *Mermet*, and *La France* roses. About one thousand roses were used in its construction.



I am no lover of large designs, but I could not help admitting that this was a very beautiful piece of work. The accompanying photograph, taken under very unfavorable circumstances, will convey some idea of the design—which is generally conceded to have been the finest piece of floral work seen in Baltimore for many a day. A. W. M.  
Baltimore.

### Mushroom Growing.

BY WM. FALCONER.

Having heard a good deal about Mr. Wilson's mushroom beds, I called there yesterday (18th inst.) to see them. Mr. Wilson has a very extensive greenhouse establishment at Astoria, near New York. The mushroom beds have been made under both the middle and side benches in the greenhouses, and occupy an immense space—I should think some hundreds of square yards. The beds are all flat, built upon the ground, and without any protection from drip from the benches above. And in order to exclude strong light from them, muslin is tacked over the openings between the benches and the beds alongside the pathways. Some of the beds are in bearing condition, others coming in, and some more recently spawned ones not yet showing any signs of mushrooms. The mushrooms are of the buff-colored variety usually got from brick spawn.

Mr. Wilson tells me that he cannot overstock the market. The wholesale dealers in New York alone will take 200 pounds a day at a dollar a pound. He says whatever he makes in this way is the labor in making the beds and gathering the crop excepted—almost clean profit. He needs the manure and loam, anyway, for potting his plants, and it is in better condition for this use after being done with in the mushroom beds than it was before being used in them. And as there are large car-horse stables near his place, he gets the manure fresh and handy.

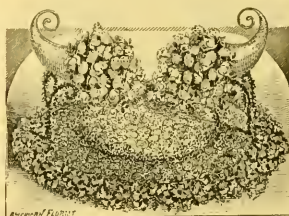
He does not think the drip from the benches hurts the mushrooms; indeed, he had last year some of his best mushrooms where the drip was heaviest. In a cool house he finds that the mushrooms take sometimes as long as two months after spawning time before they appear; in a warm house usually about six weeks. Around the chimneys, where the heat is great, very few mushrooms appear. He has planted spawn in the beds on the benches in which carnations or other plants had been growing, but, he says, with indifferent success.

Still there is, in my opinion, something amiss in this mushroom business, even if it is, as Mr. Wilson asserts—"Why, they are not in full bearing yet; they are only coming in." Some of them are cracked on the top, multitudes have blasted, and wood-lice have eaten the tops out of many. Snails are also very fond of mushrooms, and it is only the youngest and tenderest they care to eat. From these two pests catching and killing is the only means of escape. As the cracking seemed worse in a bed alongside of hot-water pipes, I am inclined to think it is caused by the dry heat from the close-by pipes, and I suggested to Mr. Wilson that a 2 to 3-inch deep layer of the fresh, strawy part of the manure spread over the surface of the bed would help matters. My opinion of the blasting of the young mushrooms is too much surface water either in the way of drip or otherwise, but I hardly

think Mr. Wilson will agree with me in this.

I know of no good reason why mushroom growing should not become one of the most remunerative parts of the florist's business. In the newer, roomy, steam-heated houses where there is plenty of accessible room under the benches, beds can be more easily made than under the old style hot-water heated buildings. But I should disavise making beds under open benches—that is, under benches on which pot plants are grown—because of the great amount of drip that must fall from them. But in the case of rose, carnation, bouvardia and other benches where the plants are planted out in beds, with a little care in watering there is very little danger from too much drip.

I have grown mushrooms in considerable quantity for some years past, and have got very satisfactory crops. We grow them in a regular mushroom house, 83 feet long by 8½ feet wide, and heated by 4-inch hot-water pipes. While the



CARNATION DESIGN

greatest care and attention is needed in order to grow mushrooms successfully, there is no secret at all in their cultivation. But the amount of balderdash and alleged secrets that I have heard about growing mushrooms is almost incredible. My beds now are altogether worked by ordinary day laborers who had no previous experience whatever in growing mushrooms, and I must say that I now get far better crops than I did when I had a "skilled" Parisian grower chuck full of "secrets."

My earliest beds come into bearing about the end of October, and I endeavor to keep up a succession till the end of April. I have failed to get good crops before October, probably on account of the heat, and after April grubs attack the mushrooms and render them worthless. Hence I don't attempt growing mushrooms in summer.

**Manure.**—I use horse manure, fresh as I can get it, and with the roughest part of the straw shaken out. This is heated, turned frequently to avoid "burning," wetted with water if at all dry, and when moderately well rotted by heating and turning and the rank heat is gone, I make it up into beds.

**The Beds** are about twelve or thirteen inches deep and built as firmly as I can pack them by beating them as we go along with the back of the dung-fork. When finished, they are very solid. If the manure is pretty fresh the heat soon rises again and in about ten days runs up to 130° or 135°, then declines gradually. There is no fear of it burning—it is packed too hard for that. But if the steam from it should be likely to be injurious to anything else in the house, a

good layer of loose straw from the manure pile shaken over it loosely will greatly arrest the steam.

**Spawn.**—I use the English brick spawn. I have also used many boxes of French spawn. But I get bigger mushrooms from the brick spawn, and they are better flavored. True, they are darker in color, but if grown under straw or in a dark place, many of them will come white as snow.

**Spawning.**—After the heat in the beds declines to 110°, it usually drops 5° to 10° a day till it reaches 70° or 75°. I usually spawn the beds when they are about 90°. I have spawned them at 110° with capital results; the same at 60°, only the lower the temperature the longer are the mushrooms in appearing. In spawning, I break up the bricks into bits one to two inches square and insert these three inches or thereabout deep under the surface of the manure and about nine to ten inches apart. I don't dibble them in, but with a small pointed tool like a hand-weeder raise the manure enough to let in the bit of spawn, then pack down the manure again.

**Covering the beds with earth.**—About ten days after spawning I cover the beds with between one and two inches deep of soil. I don't wait till I first see the spawn "run"; indeed there is a good deal of twaddle in this "running" business. For experiment's sake I have had beds earthed over as soon as they were spawned, in others have waited for three weeks, and get fair mushrooms in both cases.

**The earth for covering.**—I use ordinary loam. I don't like the fatted earth of the garden or the compost from the potting pile, but good pliable loam free from manure. It doesn't matter whether it is rough or fine; providing it is put on firmly, the mushrooms will come through it all the same. And I haven't found a particle of advantage in sod over fine soil.

**Temperature.**—I keep our houses night and day at 60° precisely. Higher gives us a crop a little sooner, but it is a light crop and soon past; lower, it will be longer before the mushrooms appear, and as a rule they will come smaller and fewer at a time, but last in bearing longer.

**Watering.**—Endeavor to do without it, at the same time never hesitate to water the beds if they get dry. Use tepid water, apply it gently through a water-pot fine rose, but never give enough to saturate the manure. If there should be much likelihood of the beds getting dry, I should keep them covered over with the fresh straw from the manure pile. Under this covering the mushrooms come up as clean and white and plump as possible, only great care is needed in gathering them. But under no circumstances would I allow drip fall upon my mushroom beds. If the atmosphere of the house is very dry, sprinkle a little water about, but avoid a damp-feeling, musty air, and never raise a steam in the house.

**Ventilation.**—In mild weather I ventilate a little—just enough to maintain a sweet atmosphere—but I am as shy of cold draughts in my mushroom house as in my rose house.

**Darkness or Light.**—In dark quarters mushrooms rise up higher out of the bed and are whiter in color than in well-lighted houses; but darkness is not at all necessary to mushroom growing. In all cases, however, sunshine should be excluded.



ADIANTUM CUNEATUM GRANDICEPS.

*Duration of a bed in bearing.*—A good fresh bed will continue in prime bearing for three weeks, and for some time longer in a sort of desultory way. A bed in which all the manure has not been fresh will last four or five weeks in fair bearing; in fact, I have had them keep on nearly twice as long. But the most satisfactory bed by far is the first—the brisk one. As soon as its best days are over, out with it and in with another.

*A second crop* is sometimes obtained from the beds, but I never had them prove certain enough to justify me in risking them. But one of the finest crops I ever saw was a second crop.

*Gathering.*—I gather my mushrooms before they spread—that is, just as the frill begins to break. I do not twist them out at the root, as most people do; I cut them over and leave the stump. In gathering by twisting we are apt to root out many tiny mushrooms; by cutting, these are not disturbed. The cut stumps soften in about a week, and are then very easily removed. Put a pinch of earth into the holes caused by their removal. All things being favorable, I expect to see mushrooms in six weeks after spawning, but not a full crop before the eighth week. But they are very unreliable in their time of appearing, and especially so between October and December. Some claim that they can tell to a day when their beds shall come into bearing, but they had better tell that little story to the marines.

*In open beds.*—I have time and again seen nice crops of mushrooms grown in open beds in the greenhouse among carnations, roses or cucumbers—sometimes natural and at other times “planted”—and that, too, without receiving any special care whatever.

#### Gordon's Carnation Design.

This basket was made for a broker who had a lucky strike, and represents the pouring out of gold from horns of plenty. On an oval tray is a center of Emerald carnations. (These are tinted by the new process.) Around the center is a band of red carnations, and this is

fringed with a thin line of adiantums. At each end, raised on wires covered with foliage, is a white enameled and gilded cornucopia which are throwing their golden contents (Buttercup carnations) over the center. The design was unique and extremely elegant. B.

#### Adiantum Cuneatum Grandiceps.

This is certainly one of the best adiantums introduced of late years. A fully developed specimen plant is as beautiful as anything in the fern family, excepting the incomparable *A. Farleyense*, and its fronds, when cut, are very suitable to use in cut flower work.

It comes easily from seed and will grow freely under the treatment suitable for *A. cuneatum*, to which it is closely allied. It is a stronger grower than this well-known variety, with fronds much longer and the pinnules broader. Its most notable characteristic is the neat and elegant crest on the apex of each frond; this, with its graceful, drooping habit, gives it a very handsome appearance. Large specimen plants are fine for conservatory decoration or for exhibition purposes, and small plants well adapted for using with other sorts in the fern plateaus now so popular for the dinner table. From its propagation and culture and its usefulness in all stages of growth, it must become very popular.

ROBT. CRAIG.

#### Is Smilax Profitable?

The question asked by “A” in No. 58 of the FLORIST, as to whether the growing of smilax is profitable, can surely be answered in the affirmative by all who have grown it to any extent. It is so easily managed, and if placed in a location at all suitable to its requirements, good strings can always be expected.

To prove that a bed of smilax will produce good returns, it is only necessary to examine results and to state facts. Smilax need not be given more than six inches of space from plant to plant in the rows, and twelve inches between the rows. Suppose we have a bed nine feet

wide occupying the center of a house 100 feet long. In this bed we could place about 1,800 plants. If these are grown in the best possible way, four strings ought to be cut from each plant during the course of the year, making 7,000 strings as the product of a bed having the length and width already stated. Grown in good condition, of good average thickness—not the miserable little stuff some growers send out—these strings should net about 15 cents each, thus bringing as the total income from this bed of smilax the sum of \$1,000. Besides this center bed, side benches in the same house could be utilized for the growing of pot plants. Any florist knows that if he can sell \$1,000 per annum out of a house 100x20 he will be doing fairly well as times go.

Some may take exception to these figures and claim that four crops of smilax cannot be cut from the same house in one year. What has been done once can be done again. All that is needed is a good house, well heated and not darkened by a forest of heavy rafters; neither should the plants receive much shade in summer, and none at all in winter. If strict attention is paid to watering and spraying, and also to the tying of fresh strings as soon as one is cut, no trouble need be had in obtaining good smilax in large quantities.

There does not appear to be any probability of another vine taking its place. *Asparagus plumosus* is handsomer, but it is a slow grower, hard to propagate, and can never be had but in limited quantity. *A. tenuissimus* is a faster grower than *plumosus*; still it does not supersede smilax, and to judge by the demand of the public, it is not likely to do so. One thing should be guarded against in the growing of smilax for profit, and that is over-production. There must always be a limit to its sale. Good roses, carnations and violets can generally be sold at some price, no matter how much the market is flooded with flowers. Glut the market, however, with smilax, and all that could be done with it would be to throw it away. Those engaged in growing smilax should plant only that proportion which they know they can readily dispose of. To insure the cutting of four crops, it is necessary that the strings are not allowed to remain too long without cutting. Therefore grow only enough to supply a known demand. A house of smilax will need much less expenditure of labor than any other paying crop that can be grown.

Albany, N. Y.

A. E. WHITTLE.

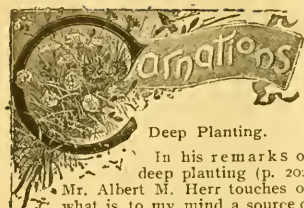
WILL SOME ONE tell me through the AMERICAN FLORIST, if there is any way to exterminate little white worms in the earth at the roots of plants, without transplanting the plants? Also, what kind of manure is the best for watering purposes, old or fresh?

A FLORIST.

WARM LIQUID MANURE is to my mind as acceptable to roses, callas and other growing plants, as a cup of hot coffee to a man these cold days when the sun keeps shady a large portion of the day. Our “tank” is under cover next to the packing house, and a steam pipe leads into it, which with a very slight turn of the valve gives enough heat to keep out frost. The tank is elevated about two feet in front and four feet at the back and is six feet wide and twelve feet long; we have a hose attachment and a “gate” valve at the outlet and run the liquid through 150 or 200 feet of hose to all the houses; it saves time and money.

HARRY CHAAPEL.





### Deep Planting.

In his remarks on deep planting (p. 202) Mr. Albert M. Herr touches on what is to my mind a source of much failure and disappointment in floriculture. Planting should be carefully done under all circumstances, but, in the spring for instance, in the hurry of getting stock planted out, and with men that are not always particularly careful, there is a great probability of plants getting into the ground much deeper than there is any need for; or an accident may occur, such as Bro. Herr narrates. I have seen all this time and again, but I have never noticed any very disastrous results as a sequel. I have rarely seen a plant rot off from deep planting out-doors; and when taking up the carnations in the fall I think Mr. H. will have found that the stems covered up as he describes, were perfectly sound, while in the greenhouse under similar circumstances, they would have rotted off or developed a very sickly growth.

The evil against which we must guard is deep planting in the greenhouse. I think the best *bouvardia* I ever saw was grown by Mr. Edwin Lonsdale, Philadelphia, in an extremely shallow bed; and the best carnations the writer ever had, were grown on a bench in about six inches of soil. I consider eight or nine inches a sufficient depth of soil for all in-door purposes. The watering and syringing necessary to keep the plants from wilting when first taken in, is apt to get the bed pretty wet; it is a comparatively easy matter to get a shallow bed into condition again, but when a deep bed once becomes saturated, it seldom dries out until the plants have become seriously injured.

A. W. M.

Baltimore.

**CARNATION "EMERALD."**—Mr. Fred. Gordon, New York, sends us several blooms of a carnation labeled as above, and which are white with a green band near the edge of the petals. As the green diffused itself throughout the entire petal when the flower was placed in water for a few hours, we concluded that the "Emerald" strain should be still further "fixed" before being extensively propagated. For this reason we believe it should be some time before "Gordon's" remarkable new *Hybrid* Carnation "Emerald" is offered to unsuspecting plant buyers.

**BURSTING THE CALYX.**—Nature provides the carnation against splitting its calyx in two ways. On some flowers the claw of the petal is long enough to carry the petal itself entirely beyond or above the calyx. In other flowers the calyx is evenly and deeply toothed, affording room for the petals to expand. Carnations having either of these anti-split qualities may be relied on to produce perfect flowers.

S. F.

**FLOWERS NOT OPENING.**—Can some of our Boston friends tell why the blooms of Anna Webb carnation do not open properly? When about half expanded they curl up and then dry up completely—at least that is the way they have gone with me. Any information would oblige.

Montreal.

JOS. BENNETT.

### Flowering the Stephanotis.

In answer to "H" (page 203), he should have no difficulty in flowering *Stephanotis floribunda* freely enough, providing the warm end of his house will give him a night temperature of 65°. I should prefer to plant it in a solid bed. Some growers prefer to mix a little leaf mould or peat with the soil, but the best *stephanotis* I ever saw was growing in loam and sand. Shading is not generally necessary, unless the leaves show signs of burning. The plant is a favorite with mealy bug, and constant syringing is therefore necessary. When growing, it will require plenty of water at the roots, but a period of rest should be given, and some reduction of the temperature before starting into bloom.

A. W. M.

Baltimore.

### Bouvardias for Cut Flowers.

In reply to "Florist" (page 236), my own experience in growing *bouvardia* for cut flowers, is decidedly in favor of planting out on benches. Some growers first pot their plants and when they have become established in the pots, transfer them to the benches, this plan, however, entails more labor than is at all necessary. If they are to be grown in pots, pot them, otherwise plant them out on the benches at once. I have tried pot culture, but although fairly successful, I was satisfied that planting out was the most profitable method, and so I returned to first principles. A neighbor of mine grows all his *bouvardia* in pots, and does it very well; but I have never seen as good *bouvardia* in pots as I have grown myself, and seen with others, on benches.

Baltimore.

A. W. M.

### Don't Grow too Many Varieties.

There is such a thing as attempting too much. Men must calculate their strength and ability to perform before they undertake to execute, if they wish to be successful in their efforts. He that is continually commencing many labors generally fails to accomplish any one of them. The man of one idea who devotes all his time and all his labor to its development will do better than the man of many ideas, who lacks, however, the power of concentration.

These remarks are applicable to those florists who think that by growing a little of many things more money can be made than by confining their attention to a few specialties. Experience teaches us that in every business and profession, it is the specialist that acquires the most renown and reward for his labor. Look for a moment at those florists, who have, by their own exertions, secured prominent positions; and apparently obtained wealth. We notice that they have gradually curtailed the number of varieties grown until—no matter how large the establishment—their attention is confined to but two or three kinds. Let a florist ascertain by observation what plants he can do well, and then devote his houses, where practicable, to the growing only of those special plants and he will find that his business will develop, and the profits will increase. No matter how careful the attention, when many varieties of plants are grown, some few will be sure to be neglected. Those which we think that we can make the most money from will receive the care, and those not so considered will be apt to be overlooked. Speaking from a business point of view, when we grow plants from which

we do not think any money is made, their destination should speedily be the rubbish heap.

The practice of buying every new plant offered for sale is to be deprecated. I often wonder how many florists there are who make money from buying new stock. We hear of something new—just what we have been looking for—and straightway invest, generally to find our investment anything but a paying one. It is hoped that these words will not be misunderstood and supposed to be an attempt at censure. It is desirable that every encouragement be given to the raiser of new varieties, and that he should receive adequate compensation for his trouble. The argument is, that, to the majority of florists, the investment of money in the purchase of new varieties of plants is anything but remunerative to the purchaser. In these days, the only way in which money can be made from the cultivation of any plant, whether foliage or flowering, is by growing in large quantities. Should any new variety of rose, carnation or other marketable plant, be thought of value and likely to supply a demand, buy in large quantities or leave it alone. To buy six, twelve, or even twenty-five, with the expectation of reaping a harvest from the purchase, is a mistake.

These thoughts are addressed, principally, to small growers—men who fancy they must have a little of everything that is in the market. Concentrate attention upon a few things, learn to do these well, and more money will be gained than by any other arrangement.

Albany.

A. E. WHITTLE.

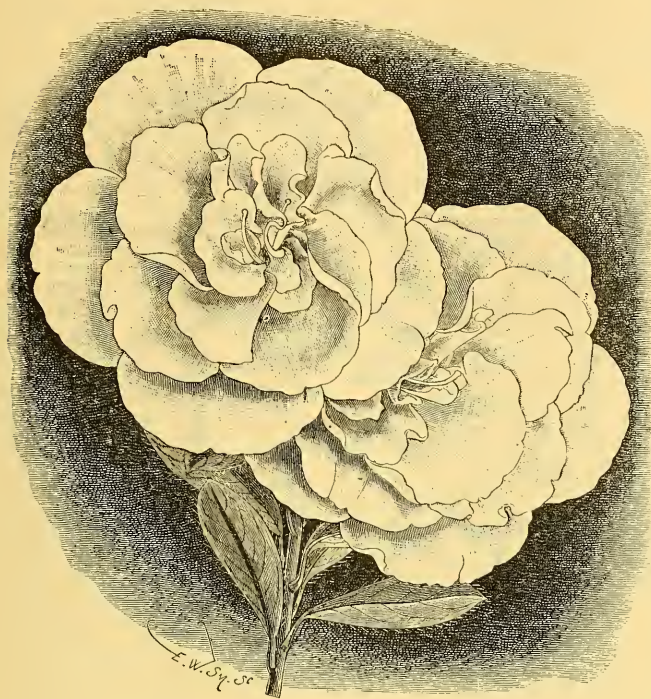
### Baltimore Plant Notes.

All plants intended for early sales should now be pushed ahead, at the same time keeping up a good succession of young stock both in pots and in the cutting bed. Don't allow the latter to remain empty; it is better to have too much stock than not to have enough; at the same time it is a mistake to grow more stock than our capacity will permit. I saw 5,000 geraniums the other day in a space that would properly grow 3,000. When grown in this crowded manner, the plants can't possibly have that robust and hearty appearance which invariably catches the customer and his money.

I have been hearing a good many complaints lately about cutting bed fungus. Lime and sulphur in equal parts will check the evil, but "prevention is better than cure," and a little air admitted to the propagating house every fair day will prove a preventive of fungus, while keeping everything in the house fresh and healthy.

We sometimes err, from one cause or another, in allowing cuttings to remain in the bed long after they are rooted. I saw a batch of *petunia* cuttings last week that had become "drawn" until they were thin as knitting needles. It would take these fellows a long time to make decent plants. When the cuttings remain in the bed too long, the roots become so hard that it requires a long time after they are potted to get them into a good growing condition.

There is much difference of opinion as to the potting of calloused cuttings. I once worked under a man who when potting off a batch of cuttings always threw away such as were merely calloused. There are others again who preach and practice the reverse of this, and for my own part—unless I am very



AZALEA INDICA, DEUTSCHE PERLE.

indifferent as to the stock—I always pot calloused cuttings. When potting a batch of rose cuttings lately I followed the same practice, and of two or three dozen calloused cuttings only five have missed, the rest being nicely rooted at this date. I generally set such cuttings, when potted, by themselves, as they require special care as to watering until the roots have started.

Among the newer single geraniums few are better than *Glorie de France*; it certainly deserves to become popular; it is dwarf in habit, but a most abundant bloomer, the trusses being very large and borne well above the foliage. The flowers are white with salmon center, and the outer margin a pretty peach color. I really consider it one of the prettiest geraniums I have seen for a long time; it cannot fail to prove a first-rate variety for marketing, and is said to be a good bedder.

In coleus, Halliday offers one called *Yellow Jacket*; it is on the same order as *Golden Bedder*, but lighter in color and minus the pinkish streak so common in the latter. It is said to be fine outdoors, but I think it will be hard to beat *Golden Bedder* as a yellow coleus.

A. W. M.

#### *Chrysanthemum Christmas Eve.*

The name of this variety is not an exaggeration; we believe it to be one of the best for Christmas trade and late cutting. Florists will find this variety valuable for funeral work when carnations and other

white flowers are scarce. We grow our plants on in 5-inch pots; in the fall, when time to take in, we keep them cool and shaded for some time before taking them in the heat. In this way fine bloom can be cut as late as New Years. I would also call attention to another late variety, *Mrs. J. B. Wilson*; at Christmas time this variety can be classed with fine flowers. It is very large, with a rich, glossy appearance which makes it useful for baskets and decorations. D. T. C.

#### *Azalea Indica, Deutsche Perle.*

We have several times made reference in these columns to this grand Indian azalea, and now furnish our readers with an illustration of it. As its name indicates, it is of continental origin, and might safely be described as the best double white ever introduced. There are larger-flowered ones in cultivation, but the present, no doubt, derives its popularity from the regularity and rounded character of its flowers, together with their long-lasting properties, and their purity of color. Owing to the loose arrangement of the segments of the corolla, there is an absence of the stiffness and rigidity of flowers that are so fully double as to form a solid mass. The individual blooms are about the size of those of a gardenia, for which they constitute an admirable substitute for cut flower purposes. They have also been compared to the eucharis, a fact which says much for their purity of color. Small plants, when well

grown and ripened, produce a great profusion of bloom, which may be cut, wired, and used in endless ways where white flowers are required. As a commercial plant it has proved to be one of the best introductions of recent years, and is now extensively grown for market, where its flowers, when cut with an inch or two of stem, find a ready sale.—*Gardening World*.

#### Some Queries.

Among other houses we have two running in the same direction, about four feet apart; one is 70 x 17, the other 40 x 17, both heated with flues. We are thinking of heating the smaller house with hot-water pipes from the furnace in the larger house, by having a coil of pipe placed in the furnace. How many rows of pipes around the house (40 x 17) will be necessary to keep the temperature from 50° to 60° at night, in Ontario, where the thermometer occasionally goes down to 20° below zero?

In growing carnations and bouvardias, which way gives the most bloom—to grow in pots, or to plant out in benches?

How would you treat calla lilies so as to have them in bloom in May?

FLORIST.

#### Massachusetts Horticultural Society.

Following is the programme of meetings for discussion during February and March. The meetings are held at Horticultural Hall, Tremont street, Boston, at 11 o'clock of the days stated. All interested in the subjects are freely and cordially invited by the society to attend the meetings:

Feb. 4—The Cultivation and Diseases of the Peach, by J. H. Hale, South Glastonbury, Conn.

Feb. 11—Late Progress in the Application of Science to Plant Culture, by Prof. Wm. O. Atwater, Wesleyan University, Middletown, Conn.

Feb. 18—The Bulb Gardens of Holland, by Robert Farquhar, Boston.

Feb. 25—Insects Injurious to Vegetation, by Prof. C. H. Fernald, State Agricultural College, Amherst.

March 3—The Influence of Flowers upon National Life, by Mrs. Fanny A. Dean, Edgartown.

March 10—Hybrid Roses, Old and New, by Wm. H. Spooner, Jamaica Plain.

March 17—Methods of Labeling Trees and Plants, by Robert T. Jackson, Boston.

March 24—Fertilizers—Agricultural, Physical, Intellectual and Moral, by Rev. Frederick N. Knapp, Plymouth.

March 31—Meeting for general discussion of such subjects pertaining to horticulture as may be suggested.

#### The New Mealy Bug.

Instead of exterminating the troublesome insects, horticulturists are continually finding new species and new genera establishing themselves on their plants, requiring on the part of the cultivator a more extended vigilance over such enemies. Some plants that have been long in cultivation, and in that time gained a reputation of being free from the attack of insects, are not absolute proof against such attack. I have never seen or heard of the common mealy bug (*Dactylopius adonidum*) on the *Ficus elastica*, which has been wonderfully free from other insects as well. However, I have just noted the appearance on this plant of a "mealy bug" probably not yet to be found in many greenhouses. This insect is figured and described at length in the Report of the Department of Agriculture, U. S., for 1880 (p. 344), by Prof. J. H. Comstock as a new species (*Dactylopius longifilius*).

The insect is about the same size and color as the common mealy bug, but can be readily recognized by the four caudal



filaments or hairs, which are fully as long as the body. Along each side of the body, from these caudal filaments to the head, are fifteen shorter hairs extending longitudinally. There is not so much of the mealy secretion about this species as is found on the common form, and the female is more active in traveling. Prof. Comstock records the appearance of this insect on several ferns and euphorbiaceae, notably the croton. Besides finding it on these plants, I note them thriving on *Ficus elastica*, dracaenas and in the flower heads of rogerias. The most intolerable insect is the one that settles itself in and about a flower.

GEO. C. BUTZ,  
Pennsylvania State College, Experiment Station.

### How to Cut, Pack and Ship Cut Flowers, from the Dealer's Standpoint.

BY ROBT. KIFT.

Read before the Philadelphia Florist Club, Jan. 7.

MR. PRESIDENT AND GENTLEMEN:—The subject as to how flowers should be cut, kept and shipped was assigned to me much against my will, as I don't "shiny" on that side. But in the game between the growers and the dealers I thought I saw a chance to make a "homer," and will try to add another to the dealers' score. You will observe that our subject is divided into three grand divisions, by commas, on the sheet as it appears in black and white, and by periods of various durations in the actual transactions of the business.

The first division, "How they should be cut," refers we suppose, first, to the manner of removing the flower from the plant, and the best time to do so. I have given this matter considerable thought, as I did not wish to make any statements or point out any ways or methods which I would not be willing to stand by, or which are not recognized by the trade. The act of cutting, as a method of removing flowers from plants, must be accepted as the only way—at least if we confine ourselves strictly to the wording of the question, which I propose to do. Adam, we are told (I thought it best to commence at the beginning), made an apron of fig leaves, but how he gathered them will ever remain a mystery. We are told, however, that he was a "grower," and that almost the first thing he did was "crooked." I am led to infer from this that the crookedness of the present day prevailing among the growers is hereditary, and they are not to be held wholly responsible for their irregularities. I would suggest a pair of shears as probably the best instrument to be used in cutting flowers, or a sharp knife is good. I have known growers who removed them with their teeth. I would not advise the latter plan, however. Several firms (manufacturers of shears) have approached me and wanted their particular line of goods recommended (mark you, for a consideration), but I spurned their offers, and therefore hope my suggestions will have the weight they deserve.

"When they should be cut." This is important, as much depends upon it; their sale is affected—presuming they are to be sold. This, I believe, is the plan adopted by the growers generally. I have been connected with the business for about fifteen years (that is, dealing with growers), and I have never known any of them to give anything away. No matter how poor the flowers were, they had to bring something. Dealers often donate, but growers never. Just when to cut them depends a good deal upon the

season of the year. Along in the fall they can be cut when pretty full blown, as there is not much demand, and it is necessary to make them look as large as possible, in order to work them off. We would advise cutting with a good long stem, as it fills up the basket, and the dealer will think he has a bargain. As the season advances, you can be more careful, taking out the eud buds when ready, and cut the stem with the weak side buds later on. You will find they will mix up well, and as the dealer is now getting busier, he will not observe your stuff so closely, and the short buds can be worked off very nicely. These directions will do very well until December, and now comes your harvest.

"How they should be kept." At this time notice every bud and flower; cut the roses very tight; just as soon as they begin to show color they should be removed and placed in the cellar; stand them in jars of clear water in a close box. Watch them carefully, selecting only the most open to ship to town. If the dealer complains of the small number sent, refer him to the cloudy weather, that your boiler is out of order, that your crop is hardly in yet, etc., etc.; and if you work him right, he will begin to get anxious, and finally about the 20th of the month he will give you an order to bring all the stuff you can, and will tell you that he will give as much as anybody else will pay you for it, and even ask you to look around among your neighbors and get what you can from them. This will give you a chance to account for your large stock that has been accumulating since the first of the month, and which might arouse suspicion. Before shipping them be very careful to trim off the ends of the stems with a sharp knife, otherwise, as some will be pretty full blown and off color by this time, he might suspect and accuse you of having had them "salted"; but a show of the clean stems and a bold front, together with an injured air, will settle all. Your carnations should not be picked for at least a month before the holidays; they will be hurst and somewhat off color, and probably go to sleep the next day, but by that time you will have the money or the credit for them, and it won't matter much. By the way, have a lot of valley ready to cut—it only costs one cent a spray, and you can easily "soak" him for eight; it used to bring fifteen, but that was in the days of your fathers. Times are hard now, and you mustn't expect too much. And the violets; do not pick them for at least three weeks; they will keep, and if they're not sweet it won't matter—it's Christmas, and he will take anything.

"How they should be shipped." Well, they should be shipped so as to arrive about 9 A. M., and if possible, later. By this time the dealer is busy with his customers, and has not time to scrutinize your stuff; but if you have anything very fine, always call his attention to it, and by placing it before a customer they may be tempted to buy some, and then you can make him take the balance, as he has broken your bunch. I have often seen this plan worked successfully. Always ask a good figure for your stuff; he will think more of it; and don't be afraid to go out once in a while with it, if he objects to the price; tell him you know where you can place it; and after you have been all around and have a lot left, you can always strike a street fellow that will give you something for it, and that's better than taking it home. If he complains about your flowers being sold

on the street for less than he can buy them of you for, tell him that he is mistaken—they were not yours, so-and-so took them all and gave you your price and was glad to get them.

At Christmas time bring the flowers yourself, if possible, and make a good show of the best; then offer to put them away, so as to help him. This generally works well, as he is so very busy. After it is all laid nicely in boxes in the cellar, where the gaslight helps to brighten the color, call the attention of some of the hands to it, and then your work is done. For when Christmas is over, and the customers come back and kick about the work—"how the flowers were all gone the next day, and they won't pay for them, and they will never come there any more"—he will never suspect you, but will blame the stuff he got from that commission fellow, and declare he will never trust him again.

### Chicago.

At a recent funeral the casket was literally buried in flowers, at the foot resting a wreath of American Beauty roses from which radiated three cypress leaves. Very few designs were seen, the tributes nearly all being in the shape of loose flowers which were artistically arranged about the apartment. One box of flowers contained only eucharis blooms, but there were five dozen of them.

The Garfield Park Rose Co. is erecting two fine new houses, covering a space of 150 x 27 feet, at their place near Garfield Park.

R. W. Rathborne, an amateur, has built two fine houses at his residence on Woodlawn avenue this winter.

Mr. Sidney Clack, who has been contemplating a removal to California, has decided to remain and defy the breezes of Lake Michigan, from which he intended to escape.

PINK GLADIOLI.—Will some one that knows tell through the FLORIST which is the best variety of pink and rose gladioli for cut flowers, in summer, out of doors? The bride, white; Isaac Buchanan, yellow; Brechleyensis, scarlet, are very satisfactory, but I have not found a satisfactory pink or light rose color.

New York.

D. W. M.

### SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order.

**SITUATION WANTED.**—By a good florist and respectable gardener. Good references. Address: A. B., care American Florist, Chicago.

**SITUATION WANTED.**—By a competent florist and nurseryman, capable of taking charge of a large place. Address: J. R., care Am. Florist.

**SITUATION WANTED.**—By a thorough rose and cut flower grower. Best of references. Address: P. M., care American Florist, Chicago.

**SITUATION WANTED.**—As propagator or foreman in a large commercial place. Address: E. E. Pajson's, care 110 and G Sts., Lincoln, Neb.

**SITUATION WANTED.**—By a German, competent in all branches of business. Private or commercial. 20 years' experience. Address: K. 32, American Florist, Chicago.

**SITUATION WANTED.**—By a young man, age 19 years; five years' experience; well recommended. Private place preferred. Address: PAUL RICHWAGEN, 5 New Heath St., Boston.

**SITUATION WANTED.**—By a single man, as gardener; thoroughly versed in rose, cut flower and fruit culture. Private or commercial place. Good references. Address: WALTER J. BAILEY, 24 Grace Ave., Harrisburg, Pa.

**SITUATION WANTED.**—By a practical florist fully competent on all horticultural matters. Either private or commercial, as propagator and manager. Best of references. Address: HORT., care American Florist, Chicago.

**SITUATION WANTED**—By an experienced florist: S. age 24; single; German; 8 years' experience in cut flowers and plant trade. Private or commercial. Address: THIBODEAU, STONICK, & CO., S. J. Thompson, 261 W. Jefferson St., Louisville, Ky.

**SITUATION WANTED**—By married man, American, as foreman, place thoroughly competent in place last three years; experienced in all kinds of gardening. Good references. Address, stating particulars and wages, GARDENER, P. O. box 10, Hollis, N. H.

**SITUATION WANTED**—As foreman in good commercial or private place; thoroughly competent in every way; 22 years' experience in Europe and U. S. English, married, family; age 35. First-rate reference. Address: FORTY, care De Wit, florist, 1401 Walnut St., Philadelphia, Pa.

**WANTED**—A partner in the seed business. Address: F. N. LANGE, St. Paul, Minn.

**WANTED**—Three young men to assist in seed and floral stores. Apply with reference. C. E. HAMPTON, Kansas City, Mo.

**WANTED**—Second-hand 4-in. cast iron pipe for greenhouse. A single man is wanted. Address: BAKER BROS., P. O. box 72, Kansas City, Mo.

**WANTED**—A good florist (married man with no family) who understands propagating and everything in the business; must be sober, honest, and well recommended. Address, stating wages, Mrs. A. LAMBERT, East Fair St., Atlanta, Ga.

**WANTED**—A good second hand, to work in a commercial greenhouse; one who understands packing and general work. Board furnished. Apply, stating wages, etc., to L. A. CASPER, Council Bluffs, Iowa.

**WANTED**—A reliable party would like to rent 10,000 to 15,000 sq. ft. of glass suitable for growing roses, in vicinity of New York City. All communications strictly confidential. Address: RELIABLE, care American Florist, Chicago.

**WANTED**—By Feb. 15, a florist competent to grow a general stock of greenhouse plants—especially roses and carnations. Must be sober, and attentive to business. A single man is wanted. Address: KEIMBLE FLORAL AND SEED CO., Oskaloosa, Ia.

**WANTED GARDENER**—Middle-aged man, for an institution; he must have a thorough knowledge of horticulture, and capable of superintending all operations, as well as qualified to instruct young men in horticultural pursuits. Address full particulars: B. A., care Henry A. Dreer, 714 Chestnut St., Philadelphia, Pa.

**WANTED**—Partner in the greenhouse business—roses a specialty. Houses 100 ft. long—six in number—all built in 1887, heated by steam. Everything in first-class order and doing a No. 1 business. This is a rare chance for a good man with ready cash. Address: FLORIST, care Letter 10, Cleveland, Ohio.

**WANTED**—(To be shipped to me list of March) 100 Ampelopsis Vetchii; 100 Anemone Japonica alba and rubra, 40 of each; 100 Clematis coccinea; 50 Clematis Crispa; 50 Jackmanni, 2 yr.; 50 Languinea Candida, 2 yr.; 25 Duchess of Edinburgh, 2 yr.; 25 Myrtle, pink and white, 50 of each; 25 Bouvardia Rosea Multiflora, 34-in. or 4-in. pots. State size and price. N. S. GRIFFITH, Independence, Mo.

**FOR SALE**—New, Grand Street Greenhouses, cheap for cash, at once; two blocks from State Capitol; convenient to railroad depots and street cars. C. F. FITZSIMMONS, Lansing, Mich.

**FOR SALE**—The best retail and wholesale florist and seedman's business in the Northwest (population 140,000). Reason for selling, with full particulars furnished on application. Address: BATA, care American Florist, Chicago.

**NOTICE**—I have engaged a man, and I wish to make it known to those through the FLORIST. I have received so many letters of inquiry, I thought this would be the best way of answering them. JAMES FAIR, Toronto, Ont.

## A BARGAIN!

### TEN GREENHOUSES,

HEATED BY STEAM.

With Stock Complete. Possession at any time. Ground alone is worth \$10,000. Price for the whole, \$15,000, or \$8,000 with a ground rental of \$300 per year. For further particulars, address

C. D., STATION "G,"  
(Germanstown), PHILADELPHIA, PA.

## —TREE ROSES.—

The very FINEST and BEST quality.

GABRIEL MARC,

WOODSIDE, L. I., N. Y.

1888.

## ROSES FOR FLORISTS.

We offer the largest and most complete stock of Roses in this country. Straight 2½-in. plants, propagated from thoroughly matured field grown plants, and grown in ordinary soil without manure or other stimulating material. They resist disease, start quickly, grow rapidly and give best results.

**ALL THE LEADING VARIETIES** in large supply at very reasonable prices—Am. Beauty, Papa Gontier, Golden Pearl, H. F. Bennett, The Bride, Her Majesty, La France, Gen'l. Jack, Parle des Jardins, Niphetos, C. Mermel, M. Robert, Pierre Guillot, Sorel d'un Ami, and hundreds of others.

**ALL THE LATEST NEW ROSES**—Lucile, Gloire d'Olivet, Mad. Scipion Cochet, Mlle. Claudine Perreau, Docteur Grull, Vicountesse de Wautier, Baroness de Fonville and all choicest varieties.

**HYDRANGEA GRANDIFLORA**—A Specialty—Immense stock, strong, open ground plants, all sizes, very low. Also *Buxus Variegata*, *Althea*, *Japan Indas*, *Japan Snow Ball* (Viburnum plicatum), *Japan Rose* (Rosa Rugosa), *Japanese Eulalias*, and a full line of the best *Hardy Shrubbery* and *Climbing Vines*, including *Ampelopsis Velutina* (Boston Ivy), *Akebia Quinata*, the *New Hollandia*, and other *Sweet-Scented Honeysuckles*, etc., etc. *New Violets*, *Chrysanthemums*, and *Hardy Palms*.

Special Wholesale Price List free on application to Florists, Market Gardeners and Dealers only. Lists priced, special selections made, correspondence solicited. Address

## THE DINGEE CONARD CO.,

—ROSE GROWERS,—

WEST GROVE, Chester Co., PA.

### ORDERS BOOKED FOR THE NEW DEEP SCARLET FORCING ROSE

## "GLOIRE DE MARGOTTIN,"

Pronounced by leading rose-growers superior to the "W. F. BENNETT," in color and lasting qualities. It is sent out as a Hybrid Perpetual, but its habits and forcing capacity would entitle it to a prominent place among the Hybrid Teas.

A limited stock will be ready for delivery by April 1st, and larger orders can be filled after May 1st.

PRICE, per 100, \$100.00; per doz., \$15.00; each, \$1.50. Cash with order, f.o.b. cars in New York City.

ADDRESS

J. A. DE VEER,

19 Broadway, NEW YORK.

## HARDMON'S

## A. C. TUCKER,

Rose Grower,

P. O. Box 190.

NYACK, N. Y.

Orders are solicited NOW for Spring delivery for the following plants, in any size pots and in any quantity:

PERLE DES JARDIN, NIPHETOS,

BON SILENCE, LA FRANCE,

SOUVENIR D'UN AMI, C. MERMET,

AMERICAN BEAUTY, BRIDE,

PAPA GONTIER, PURITAN.

Special discount given on all orders received up to Feb. 16th, 1888. Send for circular giving prices and terms.

A. C. TUCKER.

Mention American Florist.

## 100,000 ROSES.

The leading varieties, at \$4.00 and \$5.00 per hundred.

Fine stock of VERBENAS, \$2.50 per hundred.

Large stock of BEDDING PLANTS at lowest figures. Send for Trade List, now ready.

GEO. THOMPSON & SONS,

LOUISVILLE, KY.

## JAMES L. BOYSON,

CAEN, (CALVADOS) FRANCE.

1st Prize for Cut Blooms, Paris, May, 1887.

My CATALOGUE of the NEW

## EUROPEAN ROSES

will be ready January 1, 1888, and will be sent FREE on application.

A large stock of the last two years varieties, as well as all the older kinds for sale.

Send for my complete Catalogue of over 1,200 varieties, with raisers' names and date of seedling out

ROSES.

1888.

Slug Shot kills insects.

Grape Dust kills mildew.

Sold by  
the  
Seedsman.

## NOVELTIES IN ROSES.

Also the leading forcing varieties Teas, H. Teas and H. Perpetuals. 1,000 large roses in 6 and 7-inch pots: C. Mermel, La France, Sunset, Perles and Bon Silences, at \$25.00 per 100. Chrysanthemums, best varieties, 5 and 6-inch pots, \$15.00 to \$20.00 per 100. Bouvardias, 2½-inch pots, \$5.00 per 100. Gardenia Radicans, @ \$8.00 per 100. Grand Duke Josephine, @ \$8.00 to \$8.00 per 100. 3,000 American Holly, flex open, @ \$10.00 to \$12.00 per 100. Choicest buds and cut flowers at lowest market price.

JACOB SCHULZ, LOUISVILLE, KY.

## IMPORTED M. P. ROSES,

Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagation quickly. Fine plants for sale by the 100 or 1,000, at low rates.

Address

WILLIAM H. SPOONER,

JAMAICA PLAIN, (Boston), MASS.

Budded Roses for Winter Forcing or Spring Market Sales—H. P. and Teas.

### SPECIAL OFFER:

The following varieties, equal quantities of each, we sell for \$10.00 per 100.

H. P.—Anna de Diesbach, La France, Gen'l. Jacqueminot, Paul Neyron, Queen of Queens, Comtesse of Oxford, Jules Margottin, Anna Alexiev, Mme. G. Laiset, M. de Knap, Marie Batmann, Gloire de Lyon, Her Majesty, M. de Lyon, Alfred Colomb, Lyonnaise, Her Majesty, M. de Lyon, Marie Francaise Krueger, Duchess Mathilde, Cornelia Cook.

Catalogue on application. Borneant buds of the new H. P's of 1887—Earl of Dufferin, dark, nearly black, Lady Helene Stewart, red. The new Tea Rose Miss Edith Brownlow, similar to C. Mermel, very free flowering. All at \$1.00 each.

Crematen persicum, fine plants in buds which will flower in November \$1.00 each. American Beauty, Bennett, Papa Gontier, Niphetos in 6-inch pots, 50c. each.

SCHULTHEIS BROTHERS,

P. O. Box 73, COLLEGE POINT, LONG ISLAND, N. Y.

## E. BENARD,

ORLEANS, FRANCE.

ROSES ON THEIR OWN ROOTS

A SPECIALTY.

NURSERY STOCK of ALL DESCRIPTIONS.

For particulars apply to

E. BENARD, JR., NILES, CAL.





## February Flower Styles.

The rage for pink and white flowers for room and table decoration, and also personal adornment, has only been equaled by that of three seasons ago for yellow blossoms. Hand bouquets of roses are either made of Beauties, La France, Mermets or pink hybrids, or else they are composed of the Bride, Niphotos or Puritans. The latter flower is favorite with dowagers, and is in general use for the hand bunches of the mothers of bride and groom at weddings. All the bouquets of bridesmaids are either pink or white, and small roses, such as Mermets and white teas, are preferred for them. The Dawn carnation, which is both pink and white, peculiarly blended, is in large demand for bridesmaids' bouquets, and it is sometimes carried by debutantes in preference to roses. The green hand bouquet, as it is called, is very fashionable for the opera and teas. This is composed exclusively of large spiral mignonette and cypripediums—a combination of marked elegance.

Styles in room embellishment shift with marvelous rapidity at this season, every fortnight at least novelties being demanded. The garland is swept away, and picturing with flowers on panels is now the vogue. This, of course, cannot be attempted by unskillful artists or the "general decorator." The panels are worked out with the finest finish. Klunder will make one next week in which there will be thousands of blossoms. This cannot be done in his store, but a room is engaged in which the piece will be made. A picture of it will appear shortly in this paper. The Haunts made picture panels for a ball yesterday which were specimens of elegant floral work. The groundwork of the panels is formed of foliage, usually ivy or ferns, or small flowers such as can be bedded to make a smooth surface. Dark heliotrope is especially beautiful for this purpose. In relief from this is some design. Gilt baskets are cut in two and applied; in these a cluster of Beauty roses or lilies is filled. Orchids are very handsome placed on panels, the long sprays of calanthes now in blossom being particularly desirable for this use.

It is quite fashionable in decorating houses to set apart one room on the same floor with the drawing room, in the center of which there is a low bench or table filling all the space excepting sufficient for an aisle to promenade around in. This bench is covered first with foliage, and vines trailing from it reach the floor. Pots of rare foliage and blooming plants are arranged over it, forming a pyramid of growth. McConnell made a splendid embellishment of this description at the residence of T. J. Slaughter at Madison, N. J., last week, when the wedding of Miss Slaughter took place. Curtains of

flowers are very stylish for door and arch drapery at present.

New York. FANNIE A. BENSON.

## New York.

Alex. S. Burns, who makes a specialty of growing large mignonette, has been most successful this season with the spiral.

The "Dawn" carnation is having a run at W. H. Brower's. The flower is unique in color, large and handsomely formed.

Bird of New Jersey has scored a triumph in the shrubs he has forced this winter. Japan quince has been brought in, of a fine quality. It is an elegant feature of decorations.

The same corps of officers that held positions in the New York Horticultural Society have been re-elected to serve this year.

John Thorpe will occupy the place at Pearl River formerly owned by the Haunts.

Charles Henderson is shooting ducks at old Point Comfort, and recuperating from his recent severe illness.

Mr. Sargent, the well-known Boston horticulturist, is very ill with typhoid fever.

De Forrest, the Summit rose grower, has failed.

There was a feast of reason and a flow of bowl at the dinner of the Florists' Club held the 18th at Morello's. After dinner speeches were made by Peter Henderson, Robt. Craig, President Hill and John Thorpe. Mr. Craig sang "Annie Laurie."

Alexander McConnell transformed the stage of the Metropolitan Opera House into a forest scene, with a tent in the distance, for the Old Guard ball decoration. It was an effective piece of work.

Hauff Bros., on Fifth avenue, had their store broken into the night of Jan. 15. The safe was drilled, but the burglar alarm brought in the police before the thieves succeeded in opening it.

James Gordon of Brooklyn is coloring with green, white carnations, with unique effects.

## Boston.

Trade in cut flowers was very dull here during first half of January, but has brightened up considerably within the past few days. Roses are not very abundant. Freesia is offered in immense quantities and goes slowly at low prices. Lilacs also seem to move slowly, the demand not being equal to last year. Roman hyacinths are not so abundant as they were at the holidays, and now sell fairly well. The lily of the valley offered here at present is the finest ever seen in this market. A few yellow narcissus are to be had, but there is a great call for them

and they bring as high as \$12 per hundred. Carnations are more abundant, with prices tending downwards. Adiantums scarce and inferior in quality. Smilax plenty and cheap. One of our well-known rose-growers cut 1,850 American Beauties from one house in December.

The house-warming of the Gardeners' and Florists' Club on Jan. 21 was a great success. There was a generous collation, followed by speeches, recitations and songs. About ninety members were present. The club room was finely decorated with pine boughs and laurel festoons, and several large baskets of roses graced the tables. These were contributed by various members of the club.

Mr. Wm. Doogue, superintendent of parks, has been quite ill, but is now somewhat better and is expected to recover.

W. J. S.

## Philadelphia Retail Prices.

Bon Silenes, \$1 a dozen; Goutiers, Perles, Niphotos, \$1.50; Mermets, \$2.50; La France, \$3; Puritans, \$4; Beauties and hybrids, \$6 to \$9; lily of the valley, \$1.50; Romans, narcissus, tulips, \$1; carnations, 35 cents; Grace Wilder, 50 cents; double tulips, \$1.50; freesias, 75 cents; double violets, \$2 a hundred; single violets, 10 cents a bunch; smilax 35 cents a string; heliotrope, mignonette, 25 cents a dozen sprays.

## New York Retail Prices.

Bon Silenes, 75 cents a dozen; Goutiers, \$2; Perles, Niphotos, \$1.25; Brides, Bennetts, La France, \$3; Beauties, \$6; hybrids, \$5; tulips, hyacinths, freesias, \$1; lily of the valley, \$1.25; carnations, 50 cents; smilax, 40 cents a string.

GARDEN AND FOREST is the name of a new horticultural journal of which the first number will be issued some time this month. It will be an illustrated weekly, under the editorship of Prof. C. S. Sargent and will be published in New York. It is intended to cover pretty well the entire range of horticultural matters, including forestry, to which latter subject Prof. Sargent will devote considerable attention.

MINNEAPOLIS.—Holiday trade was larger than last year. New Year's was dull, but that for Christmas was enough better to make up the difference. The calls were about equal for loose flowers, baskets and designs. The churches did about all the decorating. After roses, the best call was for lily of the valley, Romans and carnations, Grace Wilder being a special favorite among carnations. Prices same as last year, except for roses, which were a little higher; fair supply.

**THE AMERICAN FLORIST**

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 Cents a Line, Adgate;  
Inch, \$1.40; Column \$14.00.  
Cash with Order.No Special Position Guaranteed.  
Discounts, 3 months, 5 per cent; 6 months, 10 per  
cent; 12 months, 20 per cent.  
No reduction made for large space.The Advertising Department of the AMERICAN  
FLORIST is for Florists, Seedsmen, and dealers in  
wares pertaining to those lines ONLY. Please to  
remember it.Advertisements for February 15 issue must  
REACH US by noon, Feb. 8. Address,  
THE AMERICAN FLORIST CO., Chicago.**Catalogues Received.**

Oscar H. Will, Bismarck, Dak., seeds;  
Iowa Seed Co., Des Moines, Ia., seeds;  
W. T. Bell, Franklin, Pa., plants; H.  
Cannell & Sons, Swanley, Kent, Eng-  
land, chrysanthemums; Robert Owens,  
Castle Hill, Maidenhead, England, chrys-  
anthemums; Alex. Dickson & Sons, Bel-  
fast, Ireland, seeds; Wm. Swayne, Ken-  
neth Square, Pa., carnation plants; R. &  
J. Farquhar & Co., Boston, seeds; B. L.  
Fragg & Co., Springfield, Mass., seeds;  
W. R. Shelmire, Avondale, Pa., carnations;  
John Laing & Sons, Forest Hill,  
London S. E., England, seeds and plants;  
Louis C. Lischy, Nashville, Tenn., plants;  
A. Giddings, Danville, Ill., plants; Storrs  
& Harrison Co., Painesville, O., plants;  
C. H. Allen, Jamesport, N. Y., bulbs and  
seeds; Nelson & Forsyth, Berlin, Ont.,  
hot-water heater; J. B. Root & Co., Rock-  
ford, Ill., seeds; J. A. Simmers, Toronto,  
Ont., seeds; Chas. Krick, Brooklyn, N.  
Y., plants; James Griffith, Cincinnati,  
wire floral designs; L. Templin & Sons,  
Calla, O., plants; Gould's Mfg. Co.,  
Seneca Falls, N. Y., pumps and hydraulic  
machinery; A. M. & J. B. Murdoch,  
Pittsburg, plants; T. W. Wood & Sons,  
Richmond, Va., seeds and plants.

THE GARDENERS' MONTHLY AND  
HORTICULTURIST of Philadelphia has—  
owing to the death of its publisher, Mr.  
Charles H. Marot—been purchased by  
the American Garden of New York, and it  
will be merged into that journal. The  
monthly was, we believe, the first Ameri-  
can horticultural journal which sus-  
tained life for any length of time, and in  
it an old landmark in American horticul-  
ture has passed away.

**HAMMOND & HUNTER,**

Wholesale dealers in

Cut Flowers and Florists' Supplies

61 West 30th Street, NEW YORK.

**WELCH BROS.,**

WHOLESALE FLORISTS,

165 Tremont Street, BOSTON MASS.

We make a specialty of shipping choice Roses and  
other Flowers, carefully packed, to all points in  
Western and Middle States.  
Return Telegram is sent immediately when it  
is impossible to fill your order.**KENNICOTT BROS.,  
WHOLESALE FLORISTS.**

ALL CUT FLOWERS IN SEASON.

Write for price list. Consignments solicited.

27 Washington Street, CHICAGO.

**CUT FLOWERS FOR THE TRADE.**CARNATIONS, VIOLETS, ROSES, SMILAX, BULBS, ETC.  
Having doubled the capacity of my houses, with  
steam heat in all of them, I offer a large variety.**JOSEPH REYNARD,**

Successor to THOS. F. SEAL,

UNIONVILLE, Chester Co., PA.

Telegrams to West Chester, Pa. will reach me  
promptly, but letters should be sent to Unionville.**Wholesale Markets.****Cut Flowers.**

BOSTON, Jan. 25.	
Roses, Teas.....	\$4.00 @ \$5.00
" Niphetos.....	6.00
" Perles.....	5.00
" Mermets.....	12.00
" La France.....	12.00
" Am. Beauty.....	50.00
Carnations, long.....	1.00 @ 2.00
Lilacs.....	10.00
Roman hyacinths.....	5.00
Roman hyacinths.....	4.00
Narcissus, Paper White.....	12.00
" Trumpet.....	12.00
Tulips.....	1.00 @ 1.50
Smilax.....	12.50
Adiantums.....	2.00
Callas.....	12.00
Freesia.....	2.00 @ 3.00

NEW YORK, Jan. 25.	
Roses, Bon Silences.....	4.00
" Perles.....	5.00 @ 6.00
" Papa Gontiers.....	6.00 @ 8.00
" Niphetos, Souvs.....	4.00 @ 5.00
" Mermets, Brides.....	12.00
" Bennetts, Cooks, Cousins.....	10.00
" La France.....	15.00 @ 20.00
" Am. Beauty.....	25.00 @ 100.00
" Puritan.....	25.00
" Jacques.....	50.00
Carnations, long stems.....	2.00 @ 3.00
" short.....	1.50 @ 2.00
Smilax.....	20.00
Mignonette.....	2.00 @ 3.00
Hyacinths.....	2.00 @ 4.00
" Violets, narcissus.....	1.00
" Lily of the valley.....	4.00 @ 5.00
" Violets.....	1.00 @ 1.50
" Lilacs, per bunch.....	1.00

CHICAGO, Jan. 25.	
Roses, Bon Silences.....	4.00
" Niphetos.....	5.00 @ 6.00
" Mermets.....	10.00 @ 15.00
" Brides.....	5.00 @ 10.00
" Bennetts, Duikes, La France.....	12.00 @ 15.00
" Am. Beauties.....	35.00
Carnations, short.....	2.00
" long.....	2.00
Smilax.....	15.00
" Lily of the valley.....	5.00
" Roman Paper White narcissus.....	4.00
Tulips.....	4.00 @ 6.00
Bouvardia, heliotrope.....	2.00
Violets.....	1.00
Callas.....	12.50

PHILADELPHIA, Jan. 25.	
Roses, Teas.....	\$3.00
" Niphetos.....	5.00
" Mermets, La France.....	15.00
" Perles.....	6.00
" Brides, Cooks.....	20.00
" Bennetts.....	10.00
" Am. Beauties.....	25.00
Carnations, short.....	1.00 @ 1.50
Roman hyacinths.....	5.00
Bouvardia.....	1.00
Smilax.....	20.00
" Lily of the valley.....	5.00
Callas.....	10.00
Narcissus.....	15.00
" Double Violets.....	6.00
Business good.....	1.00

**SPECIALTIES FOR JANUARY.**

FINE ROSES.

LILY OF THE VALLEY, \*

VIOLETS, TULIPS, \*



CYCLAMENS, ORCHIDS,

HARRISII LILIES.

**WM. J. STEWART,**

67 Bromfield St., BOSTON, MASS.

**CUT FLOWERS AT WHOLESALE****N. F. MCCARTHY & CO.**

WHOLESALE FLORISTS,

63 Bromfield St., under Hort. Hall, Boston, Mass.

We have made large contracts with the best Rose  
growers about Boston to handle their entire stock  
this season. Our stock will consist of Papa Gontier,  
Bennet, Pierre Guillot, American Beauty, Mermets,  
met, La France, Malmason, Cook, Brde, Niphetos,  
Ferie, Nel; Ann's Web and Grace Wilder pinks,  
long stems; other flowers in variety. We shall have  
a particularly large lot of Mermets and Perles so  
order to us when you fail to get them else-  
where you will feel reasonably sure of getting them.  
Unknown parties must give satisfactory reference  
or let us send C. O. D. Write for information.

**CHAS. E. PENNOCK,****WHOLESALE FLORIST,**

38 So. 16th STREET,

PHILADELPHIA, PA.

Mention American Florist.

**Thos. Young, Jr., & Co.,****Wholesale Florists,**

INCORPORATED 1885,

20 W. 24th St., NEW YORK.

**W. S. ALLEN,****WHOLESALE DEALER IN CUT FLOWERS,**

36 EAST 23rd STREET, NEW YORK.

ESTABLISHED 1877.

Price List sent upon application.

**LaRoche & Stahl,****Florists & Commission Merchants**

—OF—

**CUT FLOWERS.**

1237 Chestnut Street, - PHILADELPHIA.

Consignments Solicited. Special attention paid to  
shipping. Mention AMERICAN FLORIST.**C. STRAUSS & Co.**

Telephone 977-3.

WASHINGTON, D. C.

Growers of and Wholesale Dealers in

**ROSES and OTHER CUT FLOWERS**

1000 Puritan Planted for coming Winter.

**GEO. MULLEN,**

17 CHAPMAN PLACE, (near Parker House),

BOSTON, MASS.

**WHOLESALE AND COMMISSION DEALER IN****Fresh Cut Flowers & Florists' Supplies.**Flowers carefully packed and shipped to all points  
in Western and Middle States.  
Orders by Telegraph, Mail, Telephone or Express  
promptly attended to.**THEO. ROEHRHS,**

WHOLESALE

**FLORIST,**

153 W. 31st ST., NEW YORK.

—SPECIALTIES:—

SMILAX, NARCISSUS, LILY OF THE VALLEY.

TULIPS, ROMAN HYACINTHS, LILACS.

**CURRIE BROS.,**

Growers of and Wholesale Dealers in

**CUT FLOWERS**

MILWAUKEE, WIS.

SEND FOR PRICE LIST.

**CUT FLOWERS**The choicest Cut Flowers at lowest market rates  
shipped C. O. D. Telephone connection. Use A. F.  
Code when ordering by telegraph. For prices, etc.,  
Address,**J. L. DILLON, BLOOMSBURG, PA.****M. MALSH,**

206 S. Halsted Street, CHICAGO.

WHOLESALE DEALER IN

**CUT FLOWERS,**

AND GROWERS' AGENT.

Regular shipping orders especially solicited.



## Seed Trade.

SEED TRADE ASSOCIATION.—William Meggat, president, Weathersfield, Conn.; Albert M. McCullough, secretary, Cincinnati, O.

A NEW VEGETABLE.—*Stachys tubifera*, a new plant introduced into France from China in 1885, is now being largely grown for the Paris market by a Parisian market gardener. An analysis of the small tubers show them to be a valuable food agent. Its flavor when cooked is said to nearly approach that of boiled chestnuts.

PRESIDENT MEGGAT writes Jan. 14th, that wholesale trade is very good all along the line, with steady demand for seeds of all kinds. Sweet corn is especially active as many of the western crops have proved shorter than expected. Wrinkled peas still in demand at high prices. First-class onion seed of '87 crop holds its own, while '86 crop is being cut to push sales.

THE POSTAGE COMMITTEES from the Seed Trade Association, the Society of American Florists and the Nurserymen's organization are expected to meet the House committee on postoffices and post-roads in Washington at an early date, that the claims of the horticultural trade may be heard.

CHICAGO.—Mr. A. B. Cleveland and wife spent three days in the city last week, on their way to California. J. C. Vaughan has opened a branch store at 88 State street, and after May 1 will move his La Salle street retail store and wholesale cut flower department to that more central locality.

BOSTON.—Good judges claim that Massachusetts grown Yellow Danvers onion and Danvers carrot seed are scarce. C. H. Thompson & Co. opened their new warehouse at 71 Clinton street with a reception Jan. 12. After an excellent supper, speeches were made by a number of seedsmen present, and a general good time was had, some 300 persons being present. Mr. Austin Rogers, of Messrs. Rogers Bros., Chaumont, N. Y., was in the city last week.

LONDON, ONT.—A Florists' and Gardeners' Club was organized here Nov. 17 last, with a membership of eighteen, and the following officers elected: President, Wm. Gammage; Vice-president, Geo. Cairncross; Secretary, Geo. Griffin; Treasurer, A. K. Murdock. The club is steadily increasing in membership, and the prospects are that by spring it will number at least fifty members. Meetings are held on the first Monday of each month. At the last meeting Mr. McGill read a valuable paper on fruit, and at the next meeting one on roses will be read by Mr. Geo. Cairncross.

Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1887.

Feb. 1.—Tem. morning 12°, noon 22°, evening 20°. Wind E. Repotted young geraniums into 3-inch pots. Cleaned young alternantheras. Rearranged plants in No. 1. Primulas, cinerarias and azaleas now in beautiful bloom.

2.—Tem. 23, 39, 29. ESE. to WNW. Continued repotting young geraniums. Topped achyranthes. Put in cuttings of maurandias.

3.—Tem. 13, 24, 14. NW. Continued repotting young geraniums. Put in cuttings of lobelias and dwarf double tropeolums. Cyclamens now in full bloom.

4.—Tem. 2, 20, 22. NE. to E. Put in cuttings of chrysanthemums, heliotropes (second batch) and vincas. Pricked out in pans seedling begonias.

5.—Tem. 24, 32, 34. E. to S. Repotted young ivy-leaved geraniums and rose geraniums.

6.—Tem. 33, 37, 33. SW. to NE. Sunday.

7.—Tem. 35, 46, 43. E. to SW. Repotted ivy-leaved geraniums into 3½-inch pots, and bronze geraniums Earl Roslyn into 3-inch pots. Rearranged plants in Nos. 5 and 6. Filled five hanging baskets with ivy-leaved geraniums and maurandias.

8.—Tem. 55, 45, 33. SSW. to W. Repotted Earl Roslyn and Mt. of Snow geraniums into 3-inch pots. Pricked out in pans seedling gloxinias.

9.—Tem. 22, 35, 40. W. to S. Repotted petunias into 3-inch pots. Repotted a lot of young fuchsias for decorating houses. Potted rooted cuttings of gnaphaliums, salvias, Cuphea platycentra and Begonia semperflorens rosea.

10.—Tem. 40, 41, 35. SW. to NE. Repotted young Mt. of Snow geraniums from rose pots to 2½-inch pots. Put in cuttings of Achyranthes aurea. Potted rooted cuttings of begonias and otho-nas.

11.—Tem. 27, 20, 16. N. to NW. Pricked out in boxes seedling daisies and lobelias.

12.—Tem. 0, 11, 6. NW. to W. Same as yesterday, and repotted young Mt. of Snow geraniums from rose pots into 2½-inch pots.

13.—Tem. 10, 27, 28. NW. to W. Sunday.

14.—Tem. 35, 39, 37. SE. to SW. Continued repotting Mt. of Snow geraniums. Potted rooted cuttings of Begonia rubra, B. incarnata and B. nitida. Nipped young geraniums in No. 4. Cleaned alternantheras in No. 2.

15.—Tem. 36, 39, 35. NE. to WSW. Laid in propagating tank moss for starting tuberous begonias, gloxinias, spotted cadulmums and naegelias. Potted rooted cuttings of lobelias and libonias. Continued cleaning alternantheras in No. 2 and nipping geraniums in No. 4. Sowed in boxes seed of torenias, vincas, mimosas and single dahlias.

## MOST EXTENSIVE STOCK

## JAPANESE &amp; CHINESE

Fruit Trees, Ornamental Trees, Bamboos, Conifers, Palms, ——— LILY BULBS AND SEEDS. ——— Stock carefully raised in our Nurseries in Japan. H. H. BERGER & Co., 315 & 317 Washington Street, SAN FRANCISCO, CALIFORNIA. Catalogue free. Established 1878.

Dahlias, ground roots..... per doz. \$1.50; per 100 \$12.00  
Peonies..... per 100 \$5.00; per 1,000, 8.00  
Climbing roses in var..... per 100, 8.00  
Hardy trees in var..... per 100, 10.00  
Clematis..... per doz. \$3.00; " 25.00  
Choice 2-year old grape vines: Niagara, Warden  
Jefferson, J. Washington, President, Pook  
ington, Vergeennes, Brighton, Moore's Early, etc.  
\$2.00 per ten. 1-year old vines, one-half price.  
Hardy Clematis Bella Vitellina, etc., \$1.00 per doz.;  
\$5.00 per hundred.

F. A. BALLER, Bloomington, Ill.

## GROWTAGE'S PATENT BUILDING FOR HORTICULTURE



— GLAZED WITHOUT PUTTY. —  
Endorsed by the New York Horticultural Society.  
Illustrated Circular mailed on application.  
Plans and estimates given for every description of Horticultural Buildings.

H. J. GROWTAGE, 76 Myrtle Avenue, BROOKLYN, N. Y.

For the last five years I have given special attention to the cultivation of Asters, and the prizes and gratinities which have been awarded me by the Massachusetts Horticultural Society fully prove to what perfection I have been able to grow this superb annual. I offer the following varieties (which are the cream of the Aster family): *Truffaut's Poony-Flowered Perfection*, *Victoria*, and *Lubricated Pompon*. The following paragraph is from the Transactions of the Massachusetts Horticultural Society:—

AUGUST 21, 1886. "Today was prize day for Asters, and the display exceeded any ever before recorded, both in quality and in quantity. The centre table, running the whole length of the hall, was covered by M. B. FAXON, who placed thereon for display two thousand three hundred blooms (2300), besides one hundred blooms on another table for prizes. He then awarded the first prizes in the Poony and Victoria classes, and second prize for POMPONS."

*Truffaut's Poony-Flowered Perfection Aster*. Twenty distinct colors in splendid mixture; per large packet 25 cents.  
*Victoria Aster*. Eighteen distinct colors in splendid mixture; per large packet 25 cents.  
*Lubricated Pompon Aster*. Twenty distinct colors in splendid mixture; per large packet 25 cents.  
*Royal Mixed Aster*. This mixture includes the above three varieties, and contains twenty-five distinct shades of color; no mixture of Aster seed that has ever been sent out will give better satisfaction. For private gardens this seed is unsurpassed, giving a great variety for a little money. Per large packet 25 cents.

M. B. FAXON, Seedsman,  
21 So. Market Street, Boston, Mass.

Send for Catalogue.

## JOHNSON &amp; STOKES' GARDEN AND FARM MANUAL

For 1888, will be sent FREE to all who write for it. It is a Handsome Catalogue with Colored Plates, and the FINEST COLLECTION OF SEEDS ever offered. Our MARKET GARDENERS with varieties specially adapted to their purposes, and all TOOLS necessary to manage a complete garden. If you grow VEGETABLES FOR MARKET, tell us so when you send for our Catalogue.

JOHNSON & STOKES, 219 Market Street, Philadelphia, Pa.



FREE To All Seed Buyers. Our complete Illustrated Annual of Tinned Seeds, Bulbs, Tools, etc., tells all about seed and gardening. Colored Plates. A. W. LIVINGSTON'S SONS.

DO YOU WANT SEEDS

Prices Low for reliable seeds. Sold last season to Thousands of Farmers and Gardeners and no complaint. We are Growers as well as Dealers. Originators of Amer. Patented BEAUTY TOMATOES, &c.  
Box 131 Columbus, O.







## ELECTRO FROM A. BLANC,

HORTICULTURAL ENGRAVER,

314 N. 11th St.,

PHILADELPHIA, PA.



## "RATHER A COMPLIMENT"

SOME Seedsmen are so afraid that others will find out where they buy their

## Fine Cuts for so Little Money

that they actually cut off Blanc's name from them, "copyright and all." They say that he sells electros so cheap, that every Tom, Dick and Harry can issue an illustrated catalogue for almost nothing. I say

## "Live and Let Live."

If a florist or seedsmen can, for FIFTY DOLLARS, get cuts that four years ago would have cost *Six or Seven Hundred*, he ought to "give the Devil his due" and not begrudge other florists or seedsmen a small bone to pick.

My collection of electros is acknowledged the finest in the world and numbers some 5,000, and has been increased within the last year by \$10,000 worth of new and original cuts.

The following *Illustrated Catalogues* will be sent on receipt of postage, which may be deducted from first order:

Catalogue of electros of plants, flowers, designs, etc., with '87 and '88 supplements. . . . . 35 cts.

The same Catalogues including electros of vegetables. . . . . 50 cts.

Catalogue of cuts suitable for catalogue covers. . . . . 25 cts.

Catalogue of fruit & tree electros, 10 cts.

## A. BLANC,

ENGRAVER FOR FLORISTS, SEEDSMEN AND NURSERYMEN.

Engravings of any DESIRABLE NOVELTY made to order at a nominal price. Photos of specimen plants solicited, and paid for if suitable.

## WANTED.

Information as to the present whereabouts of the following florists:

Joseph Frederick Lux, formerly at Louisville, Ky.  
David Honaker, " Lexington, Ky.  
J. G. White, " Englewood, Ill.  
B. A. Fohl, " Indianapolis, Ind.  
L. A. Fleu, " Minneapolis.  
C. J. Deneke, " Henderson, Ky.

Address C. H. M., care American Florist.

E. WEISS, A. E. JONES, M. RICE.

## REMOVAL OF THE

Philadelphia Immortelle Design Co.,

Importers, Manufacturers and Dealers in

FLORISTS' SUPPLIES,

Designs for Grave Decorations and Funeral Purposes,

Immortelles, Grass Bouquets, and Pampas Plumes.

Removed to 904 Filbert St., PHILADELPHIA.

## BEGONIAS! BEGONIAS!

2,000 PLANTS OF SUTTON'S SNOWFLAKE.

One of the best white flowering Begonias, either for cutting or pot work. Transplanted plants at the low rate of \$2.00 per 100; \$15.00 per 1,000.

JOHN GOODE &amp; CO.,

63rd Street and Kimbark Avenue,

HYDE PARK, ILL.

Rooted Cuttings of Verschaffeltii, 1 per 100 per 1000

Victoria, Firebrand, A. G. Coleus, 1/2 doz \$5.00

Alternanthera Aurea Nana, 1/2 doz 5.00

Heliotrope, strong, mixed varieties, 1/2 doz 3.00

Saffron Roses, 2 1/2 in. pots, 1/2 doz 3.00

Those in need of stock not quoted, write and get lowest prices.

JOHN J. CONNELLY, Bryn Mawr, Pa.

## SEEDS, SEEDS, SEEDS

— We offer unusual inducements: —  
to FLORISTS in

ROMAN HYACINTHS,

LILY OF THE VALLEY PIPS,

PAPER WHITE NARCISSUS,

LILIUM CANDIDUM, &amp;c.

Crop of 1888.

Prices according to quantity required, on application.

J. M. THORBURN & Co., 15 JOHN ST. NEW YORK.

IT is a conceded fact that there is no better place in the U. S. for Nurserymen to sort up, Dealers to Pack, or Planters to order, than at the Painesville Nurseries, the aim of

THE STORRS & HARRISON CO. being to carry a full line of Fruit and Ornamental Trees, Bulbs, Shrubs and Roses. Have a remarkably fine stock of Standard and Dwarf Pears, Kilmarnock Wil-

lows and other Weeping Trees; also Grape Vines, including all the Best New Sorts—Moore's Diamond,

Empire State, Niagara, Jessica, Frances B. Hayes, etc.

Can supply car loads of elegant, large Nursery grown

Elms, Catalpas, Maples, Poplars, Tulips, etc. The

handsomest lot of Pyramidal Arborvitae and Irish Juniper ever offered, and acres on

acres of other Evergreens. Prices reduced to suit the times. Come and see. Correspondence solicited. Catalogue Free. 33d Year. 700 Acres. 24 Greenhouses.

Address THE STORRS & HARRISON CO., PAINESVILLE, LAKE CO. OHIO.













Washington.

At the first state dinner of the season at the White House, Jan. 5, all of the rooms were elaborately decorated with flowers and plants. The corners, window recesses and under the mirrors were filled with palms, ferns and tropical plants of various kinds, while the mantels were banked with cut flowers and the mirror rests held pots of blooming primroses.

In the dining room the mantels were covered with a solid mass of azaleas through which ran a line of white blossoms. The table center piece was an oblong mound of Papa Gontier roses edged with a broad band of white narcissus and Roman hyacinths fringed with smilax; this was flanked on either side by lush cushions of carnations, branching stands of wicker and wire filled with cut flowers, and high baskets of pink roses, long stemmed yellow roses hanging from the solid mass in great profusion. Each lady found at the plate a large bouquet of orchids while the boutonnières for the men were lily of the valley and rosebuds.

L. A. S.

## PLANTS and BULBS

### SPECIALTIES:

#### BULBS

Gloxinia Crassifolia Grandifolia. Fancy Caladiums, the newest sorts. Tuberous Begonia, single & double. Achimenes, six choice varieties.

In all kinds of the best selling sorts.

#### FERNS

#### PALMS

The largest stock in America in all the best decorative varieties of different sizes.

#### AZALEAS

The finest varieties in trained crowns, three sizes.

#### PETUNIAS

Dreer's Standard collection of doubles in 25 varieties.

#### VERBENAS

Twelve of the cream in clean, healthy plants.

#### ROSES

A large stock of the leading kinds—especially Papa Gontier, The Bride and La France, for forcing.

Imported low budded plants of the sorts that are always good and reliable.

#### PRICES

Are as low as good stock can be sold, which please refer to in

DREER'S WHOLESALE PRICE LIST FOR FLORISTS. Now Ready, offering the full line of all profitable stock for florists for their spring trade, mailed free. Address

**HENRY A. DREER,**

714 Chestnut St., PHILADELPHIA.

### SPECIAL LIST.

Carnations, Hinz's White, 2-inch pots.....	Per 100
Geraniums, dble. and spl., 100 var. 2½-in. pots.....	\$2.00
Roses, American Beauty, 3-inch pots.....	3.00
"Camoen's, Perles, Souv. d'un Ami, 3-in. ....	8.00
"S. de St. Pierre, The Bride, Sunset.....	6.00
Coleus, 24 varieties.....	3.00
Feverfew, Little Gem.....	2.50





## Mending a Bursted Flue.

I am reminded by the cut on page 208, "Stopping Leaks in Steam Pipes" of what at first seemed as though it would be a sad experience. Two days before Christmas 1879, a tube burst in a tubular hot-water heater which I had heating a smilax house, and a rose house. After vainly trying several remedies which proved fruitless, I had two clips made exactly like those illustrated. Instead of rubber hose, tin was used in which was a mixture of red lead and boiled linseed oil. The leak was effectually stopped for a few days, until a new tube was put in. Philadelphia. E. L.

## Send in Your Estimates.

ED. AM. FLORIST.—I would like you to call the attention of the florists in this district (and probably other states are no better) to send in their estimates of glass structures, as per circulars and blanks which have been sent to them. Out of 205 requests I have received only forty replies. This is a matter that concerns us all and will be of great benefit to the trade at large, if we can get a reliable estimate of the amount of glass in the country. Can't you wake them up? We will take care of the reports—only send them along. The state vice-presidents were requested to report to the secretary Jan. 1, 1888—but what kind of a report could I send? JOHN S. FORSTER.  
Evanston, Ill.

## BARBED GLAZIER POINTS.

## FOR SALE IN

BOSTON, MASS. . . . by Wm. J. STEWART,  
67 Bromfield Street.  
PROVIDENCE, R. I. . . . .  
CHICAGO, ILL. . . . .

Retail at 50c. per 1,000. 5,000 will be sent by Express free on receipt of \$2.50. PINCERS, 35c. Each.

## B. B. CHANDLER,

Patentee and Manufacturer.

HYDE PARK, MASS., U. S. A.

Mention American Florist.

## SOMETHING NEW.

## OUR 3-PIECE BOX

For FLORISTS and NURSERYMEN,

Which is the pride of the Florists.

ALSO LOCK CORNER BOXES OF ALL SIZES.

Sample and price list free.

SMITH & SMITH,  
KENTON, Iardla Co., OHIO.

## SYRACUSE POTTERY.

Thumbs. . . \$2.54 | Special 3-in. 4 1/4 1 1/4 -inch. . . 7.91  
2 1/2 -inch. . . 3.05 | 3 -inch. . . 4.78 | 4 1/4 -inch. . . 10.83  
2 3/4 -inch. . . 3.57 | 3 1/2 -inch. . . 5.29 | 4 -inch. . . 11.75

Above prices per 1,000, delivered free on cars. We ship all over the U. S. Free samples with first order. Order a trial crate. If you send check add 10c. exchange. Send for list, rates and list of prices at which we pack to order assorted sizes in a crate, and for list of ready packed crates. Notice that we sell at the above prices only in

## READY PACKED CRATES

Shipped at buyer's risk and freight; cash with order.  
PRICES BY THE CRATE: 3,350 Thumbs, \$8.00;  
2,625 2 1/2 -inch. \$ 8.00; 600 4 -inch. \$ 4.75;  
1,500 2 3/4 -inch. \$ 8.00; 400 4 1/4 -inch. \$ 10.83;  
1,300 special 3-in. 4 1/4 1 1/4 -inch. \$ 11.75;  
1,150 3 1/2 -inch. \$ 5.50; 120 6 -inch. \$ 3.50;  
875 3 3/4 -inch. \$ 5.50; 1,300 No. 3 Rose, 7.00;

J. N. PERKINS, Manager, Syracuse, N. Y.



## FOR THE TRADE. FLORAL WIRE DESIGNS.

JAS. GRIFFITH,

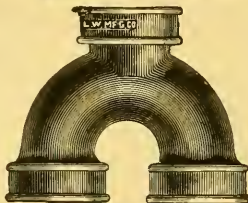
THE :: PIONEER :: MANUFACTURER :: IN :: THE :: WEST.

305 Main Street. CINCINNATI, OHIO.

SEND FOR WHOLESALE PRICE LIST.



## Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

## GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

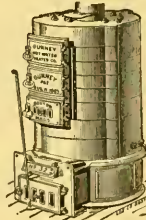
Mention American Florist.

L. Wolff Mfg. Co., 93 to 111 W. Lake St. CHICAGO

Mention American Florist.

## GURNEY'S NEW HOT WATER HEATER.

THE CHEAPEST AND BEST FOR  
Greenhouses, Conservatories and  
DWELLING HOUSES.



THE GURNEY HEATERS present more water surface to the direct action of the fire than any others (known to us) in use. They are the easiest to keep clean, and with due attention almost any kind of fuel may be used.

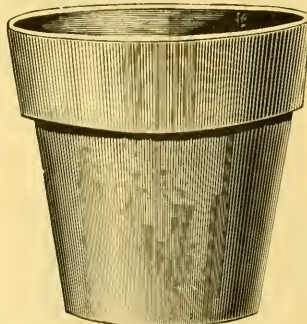
EASILY REGULATED.  
SIMPLE AND EFFICIENT  
SAFE AND ECONOMICAL.

Manufactured by the  
GURNEY HOT WATER HEATER CO.,  
237 FRANKLIN STREET, BOSTON, MASS.



JOHN A. FISH, Managing Director.  
SEND FOR PAMPHLET AND PRICE LIST.

SELLING AGENCIES.—N. H. Johnson, 140 Center Street, New York. Rice & Whitacre Manfg. Co., 42 and 44 W. Monroe Street, Chicago (West and Southwest). T. K. Chase, 51 Edmund Place, Detroit, Mich. (for Michigan and Ohio). Wm. Gardner & Co., Portland, Oregon.



## THE WHILLDIN POTTERY COMPANY,

713 and 715 Wharton St.,

PHILADELPHIA, PA.

— USE —

## The Improved Rim Pot,

AND SAVE ONE-HALF THE BREAKAGE.

Send for Illustrated Price List.

Samples, with sizes marked sent on application.

HAND TURNED POTTS  
FROM HILFINGER BROS.' POTTERY,  
FORT EDWARD, N. Y.

PRICES PER HUNDRED:

2-in. 40c. 2 1/2 -in. 50c. 3-in. 60c. 4-in. 85c. 5-in. \$1.35  
6-in. \$2.25 7-in. \$1.00 8-in. \$1.00 9-in. \$1.50 10-in. \$1.50  
12-in. \$2.50 14-in. \$3.00. Cylinders for Cut Flowers,  
10x4 \$1.20, 10x5 \$1.50 per doz. We pack in casks which  
are very strong. No charge for packing. Our pots  
are well burnt and strong. TERMS CASH. Address  
HILFINGER BROS., Fort Edward, N. Y.

## HALES' MOLE TRAP

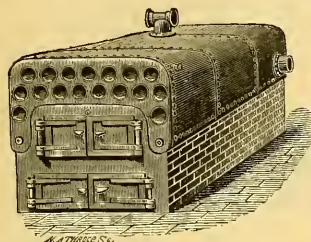
For destroying ground moles in lawns, parks, gardens and cemeteries. The only PERFECT mole trap in existence. Guaranteed to catch moles where all other traps fail. Sold by seedsmen, Agricultural Implement and Hardware dealers, or sent by express on receipt of \$2.00 by H. W. HALES, RIDGEWOOD N. J.

ESTABLISHED 1854.

## Devine's Boiler Works

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers.



Capacity from 350 to 10,000 feet of four-inch pipe.  
Send for New List.

PETER DEVINE,

387 S. CANAL ST.,

CHICAGO.

ESTABLISHED, 1866.

Floral Wire Designs,

Manufactured by

N. STEFFENS,

335 East 21st Street, - NEW YORK.



## Conservatories

GREENHOUSES, ETC.

Erected in any part of the U. S. or Canada  
Glazed on the

Heliwall Pat. Imperishable System

OR WITH PUTTY.

For further testimonials, illustrated catalogue or estimates address

JOSEPHUS PLENTY.

HOPTICULTURAL AND SKYLIGHT WORKS.

Offices, 144 Pearl Street, NEW YORK.

## GREENHOUSE HEATING.

BY A. B. FOWLER.

Explains fully all the best systems of heating greenhouses by both hot water and low-pressure steam. Tells you the points to consider in selecting an apparatus. How to adjust same to various locations; gives the results of the latest scientific experiments. Shows how to compute the number of feet of pipe required for a given space; draft and other important matters.  
It is highly commended by Mr. John Thorpe and others. Postpaid, 75c.

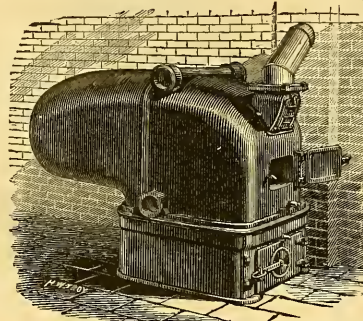
Sent on receipt of price. Address,  
AMERICAN FLORIST,  
CHICAGO.

Delegates to the next THE  
convention will travel Pullman Car Line  
via the

TO AND FROM  
Louisville, Indianapolis, Cincinnati and the winter resorts of Florida and the South. For full information address

E. O. McCormick, Gen. Passenger Ag't, Chicago.

## Greenhouse Heating AND Ventilating



Send 4 cents postage for Illustrated Catalogue.

HITCHINGS &amp; CO.

233 Mercer Street, New York.

Five Patterns of Boilers,  
Eighteen Sizes,

Corrugated Fire Box Boilers

Saddle Boilers,

Conical Boilers,

Base Burning Water Heaters

Perfect Sash Raising Apparatus.

## FLORISTS' PRICE LIST FOR 1888,

FROM

WILLIAM MECHWART,

Terra Cotta Works,

143 to 147 LIBERTY STREET

CHICAGO, ILL.



2 inch Pots, per 100	2 1/4-in. wide by 3 1/4-in. high)	\$3.50
3 " " " "	3 " " " "	4.00
4 " " " "	3 1/2-in. " " "	4.00
5 " " " "	3 3/4-in. " " "	4.00
6 " " " "	4-in. " " "	4.00
8 " " " "	4 1/2-in. " " "	6.50
10 " " " "	4 3/4-in. " " "	8.00
12 " " " "	5-in. " " "	10.00
14 " " " "	5 1/2-in. " " "	11.00
16 " " " "	6-in. " " "	14.00
18 " " " "	6 1/2-in. " " "	20.00
20 " " " "	7-in. " " "	30.00

## CACTUS AND BEGONIA POTS.

4-inch.....per 100	\$1.00
5 " " " "	1.50
6 " " " "	2.00
7 " " " "	3.00
8 " " " "	5.00
9 " " " "	8.00
10 " " " "	11.00
12 " " " "	14.00

HANGING BASKETS, DECORATED, 8-in., per doz. \$1.20; 9-in., per doz. \$1.80.

No charges for packing up to 4-in.; from 5-in. to 15-in. 10 per cent. Cash with order, 5 per cent. discount.

## SLATE AND IRON

## BENCHES

FOR GREENHOUSES.

Write for Circular.

CHAS. S. PRICE,

LANSDOWNE, PA.

JOHN N. MAY, Summit, N. J.

SIEBRECHT &amp; WADLEY, New York.

CRAIG &amp; BRO., Philadelphia, Pa.

HILL &amp; CO., Richmond, Ind.

J. C. VAUGHAN, Chicago.

Mention American Florist.

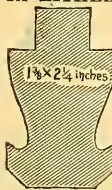
SASH BARS.  
IN EITHER PINE OR CYPRESS.

We carry a large stock in

12, 14 and 16 FOOT LENGTHS,

1 1/2 x 2 1/4 inches CLEAR CYPRESS \$2 per 100 ft.

1st &amp; 2d Cypress \$1.65 " "



## VENTILATORS

Made to Order. Write for Estimates.

JOHN L. DIEZ & CO.,  
530 N. Halsted St., CHICAGO.

## Ives' Putty Machine.

Patented Jan. 8, 1887.

The best device ever invented for laying putty. With this you can make old leaky sash perfectly tight without removing the glass. It will do the work of five men in bedding glass.

Sent by Express on receipt of price, \$3.00.

J. H. IVES, DANBURY, CONN.



## Index to Advertisers.

Advertising Rates, etc.	283
Adrich, A. R.	287
Allen, C. E.	284
Allen, S. L. & Co.	285
Allen, W. S.	283
American Garden.	288
Baller, F. A.	284
Bayersdorfer, M. M. & Co.	285
Hell, W. T.	287
Bernard, E. Jr.	281
Bism, Albert.	291
Berger, H. H. & Co.	284
Blanc, A.	284
Carusall, Jos. E.	289
Boyson, Jas. L.	281
Brackenridge & Co.	291
Brock, Jas. & Sons.	288
Burpee, W. A. & Co.	285
Burrows, J. G.	289
Butz, Paul & Sons.	289
Haxton, Geo. F.	290
Campbell, J. H. & Sons.	289
Carmody, J. D.	294
Casper, L. A.	294
Chandler, B. B.	292
C. H. M.	286
Chitty, H. E.	290
Clark Bros.	288
Connelly, John J.	286
Crane, A. H.	287
Croscup & West Eng. Co.	285
Currie Bros.	281, 287
Curwen, John Jr.	289
Desmond, Wm.	289
De Veer, J. A.	281, 287
Devine, Peter.	293
Diez, John L. & Co.	286
Dillon, J. L.	289
Dunge & Conard Co.	281
Dreer, H. A.	285, 287, 289
Dunley, J. W. & Son.	289
Ellis, B. A. & Co.	287
Ellis Bros.	287
Fellwanger & Barry	287
Exeter Mach. Wks.	294
Faber, John B.	289
Fassett, F. E. & B.	291
Faxon, M. B.	284
Ferry, D. M. & Co.	285
Fink & Co.	291
Fulweiler, P. C.	284
Giddings, A.	290
Goldman, M.	285
Goode, John & Co.	286
Gregory, Jas. J. H.	285
Griffith, Jas.	282
Griffith, N. S.	289
Growth, Henry J.	287
Gurney Heater Co.	292
Hales, H. W.	292
Halliday, Robt. H.	289
Hallcock, V. H. & Son.	287
Hammond & Hunter.	283
Hammond, Benj.	289
Hancock, Geo.	288, 290
Harman & Son.	285
Hendrod, Thos. G.	281
Herr, Albert M.	291
Hoble, Ad.	289
Holey, Henry C.	291
Hilfinger Bros.	292
Hillebrand & Brodeur	287
Holmes	287
Hutchings & Co.	293
Holzmaier & Noel.	289
Hocker, H. M.	294
Hurff, Freeman.	285
Ives, J. H.	286

Johnson & Stokes.	284
Kennicut Bros.	283
King, James.	289
Krick, Chas.	290
Krick, W. C.	285
Lamborn, Leroy.	290
Larkin, L.	290
La Roche & Stahl.	283
Livingston, S.	287
McAlister, F. R.	287
McCarthy, N. F. & Co.	283
McFarland, J. Horace.	291
McTavish, G. A.	289
Maish, M.	283
Marc, Gabriel.	281, 288
Matthews, Wm.	291
Meehward, Wm.	286
Merrick, A. T.	285
Michel Plant & Seed Co.	291
Miller, Geo. W.	287
Milliey, Jas.	283
Monon Route.	290
Moon, Samuel G.	290
Mullen, Geo.	283
Murray, Jas. C.	291
Myers & Co.	294
Nanz & Neuner.	285
Newham, R.	291
Patton & Co.	290
Pennock, Chas. E.	283
Perkins, J. N.	292
Pills, Immortelle De sign Co.	286
Plenty, Josephus.	287
Radford, Wm.	289
Rawson, W. W. & Co.	285
Reed & Keller.	286
Renard, Jos.	281, 290
Rechts, Theo.	289
Reimer, Fred.	289
Rolker, A. & Sons.	287
Salzer, Jno. A. Seed Co.	298
Saul, John.	289
Schneider, Fred.	289
Schulthies Bros.	291
Schulz, Jacob.	281
Scollay, John A.	294
Seegers Bros.	287
Shelburne, W. R.	289
Sibley, Hiram, & Co.	285
Siebrecht & Wadley.	291
Simmons, W. P. & Co.	291
Situations, Wants etc.	289
Smith & Smith.	292
Smith, Wm. H.	287, 290
Spooner, Wm. H.	281
Starr, Chas. T.	290
Steffens, N.	293
Stewart, Wm. J.	285
Stimson, E. A. & Co.	294
Storrs & Harrison Co.	296
Straus, C. C. Co.	285
Studer, N.	291
Swayne, Wm.	289
Thompson, G. & Sons.	291
Thorburn, J. M. & Co.	294
Tucker, A. C.	291
Vaughan, J. C.	288
Walker, F. & Co.	289
Waterer, H.	288
Weathered, Thos. W.	294
Weich Bros.	293
Whitlin Pottery Co.	293
Wilks, S. Mfg. Co.	294
Wolf, L. Mfg. Co.	292
Wood, L. C. & Co.	290
Woodruff, D. B.	290
Young, Thos. Jr. & Co.	293
Zingibiel, D.	297

MIDDLEBURY, VT.—Four greenhouses containing 25,000 plants, together with packing room and store, containing stock of seeds, belonging to W. D. Lane, were destroyed by fire Dec. 27 last. Loss estimated at \$6,500; insurance, \$3,000.

## SOMETHING NEW

— IN —

# Heating Apparatus

— FOR —

## GREENHOUSES.

Send for Illustrated Catalogue.

J. D. CARMODY,  
EVANSVILLE, IND.

PIPE AND FITTINGS FURNISHED  
— TO —  
PLANS AND SPECIFICATIONS.  
Contracts solicited for  
HEATING GREENHOUSES.

Most Improved plans.  
ALL WORK GUARANTEED.  
Prices furnished on application.

E. A. STIMSON & CO.,  
No. 22 and 24 Sears Street,  
DAYTON, OHIO.



Sectional View.

## IMPROVED BOILERS

### FOR HEATING

# GREENHOUSES

GRAPERIES, POULTRY-HOUSES, ETC.

ALSO FOR HEATING

WITH HOT WATER UNDER PRESSURE.  
VENTILATING APPARATUS

For Raising Sashes in Greenhouses.

**GALVANIZED SCREW EYES**

And Wire for Trellis Work.

Send for Catalogue.

Thos. W. Weathered,  
46 & 48 MARION ST., N. Y.



## Scollay's Valvular Plant Sprinkler.

ALSO THE IMPROVED PUTTY BULB,  
FOR GLAZING GREENHOUSES, ETC.

None sold at retail. Buy from your Seedsman.

## PATENT HOT WATER BOILERS.

For Greenhouses, Poultry Houses, Etc., Etc.

JOHN A. SCOLLAY,  
74 and 76 Myrtle Ave., Brooklyn, N. Y.



## Improved Hot Water Boilers

For Heating

Greenhouses, Graperies,  
CONSERVATORIES, ETC.

ALSO

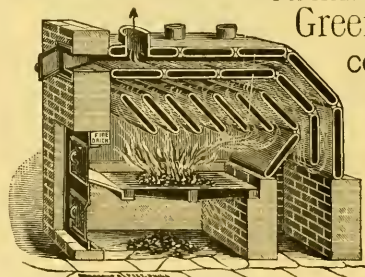
Cast Iron Pipe, Fittings, Valves and  
all Material for Heating by  
Hot Water.

Send for Catalogue.

**MYERS & CO.**

1173 So. 9th St.,

PHILADELPHIA.



# GREENHOUSE HEATING

BY STEAM, BY HOT WATER, BY COMBINATION STEAM AND WATER.

EXETER MACHINE WORKS,  
19 FEDERAL ST., BOSTON, MASS. WORKS-EXETER, N. H.

## THE CELEBRATED WILKS WATER HEATER!

For Heating

GREENHOUSES,  
DWELLINGS,  
POULTRY HOUSES,  
STORES, BATH TUBS,  
ETC., ETC.

Send for Price List.

S. Wilks Mfg. Co.,

Cor. Monroe & Clinton Sts., Chicago



ALL SIZES OF SINGLE AND DOUBLE THICK

GLASS FOR GREENHOUSES.

ALL GLAZIERS' SUPPLIES.

Write for Latest Prices.

# THE AMERICAN FLORIST



*America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."*

Vol. III.

CHICAGO AND NEW YORK, FEBRUARY 15, 1888.

No. 61.

## THE AMERICAN FLORIST

Copyright, 1887, by American Florist Company  
Entered as Second-class Mail matter.  
Published on the 1st and 15th of each month by  
**THE AMERICAN FLORIST COMPANY,**  
GENERAL OFFICES, 54 La Salle Street, Chicago.  
EASTERN OFFICE,  
Room 87, Vanderbilt Building, New York.

All communications should be addressed to the  
general office at Chicago.

**SOCIETY OF AMERICAN FLORISTS.**—E. G. Hill,  
Richmond, Ind., president; John N. May, Sum-  
mit, N. J., vice-president; M. A. Hunt, Terre  
Haute, Ind., treasurer; Wm. J. Stewart, 67 Brom-  
field street, Boston, Mass., secretary. The fourth  
annual meeting at New York, Aug. 17, 18, 19,  
1888.

### The Work of the Executive Committee at its New York Meeting.

In addition to the short report in last  
issue it will be of interest to members of  
the society to know what matters were  
considered and what sort of a mental  
feast has been prepared for their next  
summer's digestion at the New York  
convention.

It is gratifying to be able to state that  
every member of the committee, all of  
the present officers, and both of the past  
presidents were present. This will give  
some idea of the earnestness with which  
the society's interests are being pushed.  
The committee held five sessions, and be-  
sides considering a vast number of sug-  
gestions and plans relative to the welfare  
of the society; they discussed no less  
than fifty subjects of interest to the trade.  
A list of ten essays was finally decided  
upon, to be assigned to gentlemen well  
qualified to talk upon the various sub-  
jects. As soon as the gentlemen selected  
to deliver these essays have accepted, their  
names will be given in these  
columns.

The list of subjects is as follows:

1. Roses. From the growers' stand-  
point.
2. Roses. From the retail florists'  
standpoint.
3. Ferns, palms and other decorative  
plants. From the growers' standpoint.
4. Ferns, palms and other decorative  
plants. From the retail florists' stand-  
point.
5. Flowering plants most valuable for  
market purposes.
6. Modes of heating, with their rela-  
tive cost of construction and operation.
7. Nomenclature.
8. Mutual interests of the retailer and  
the grower in the National society.
9. Soils and fertilizers.
10. Landscape gardening for suburban  
homes.

It was decided to devote each evening  
session to the "Question Box." This

feature of the meeting bids fair to be one  
of the most important and instructive.  
Thirty-four questions for this department  
have already been sent in, and the names  
of gentlemen who will be asked to reply  
to the same were selected.

Among the more important matters  
discussed by the committee was that of  
the finances of the society. It was the  
unanimous opinion that the annual dues  
should be increased, and an initiation fee  
be charged in addition to annual dues to  
all new members. The committee also  
decided to recommend the establishment  
of a life membership, the receipts from  
the same to constitute a reserve fund.  
Mr. Esler, secretary of the Hail Insurance  
Co., was present and made a statement  
relative to the progress being made in this  
matter.

A committee was appointed to confer  
with the various flower pot manufacturers  
throughout the country, and with the  
plant men who use large quantities of  
pots, with a view to the adoption of a  
uniform scale of sizes. This committee  
will be heard from at the convention.

Essays will be limited to twenty min-  
utes, and answers to questions to five  
minutes each. The question of badges  
was also discussed, and there is no  
doubt that a badge of better quali-  
ty than that of last year will be pro-  
vided for the members, while the vari-  
ous State vice-presidents will have dis-  
tinctive badges with the name of the  
State whose delegations they head plainly  
printed thereon.

State vice-presidents will be expected  
to furnish a list of delegates from their  
respective States on the first day of the  
convention with the name of the hotel at  
which the delegates are stopping and to  
give such information to inquirers as he  
may be able to impart. A motion to  
amend the by-laws regarding annual as-  
sessments and arrears of dues will be  
made at the convention, and the execu-  
tive committee has instructed the secre-  
tary in the meantime to withhold mem-  
bership receipts for 1888 from all appli-  
cants whose arrearages for 1887 are un-  
paid.

A lengthy discussion of the subject of  
"Fraudulent Substitution" took place  
and the committee reiterated its deter-  
mination of last year to follow up this  
matter with vigilance and to advise the  
society to make every effort to stamp out  
all such practices. Another matter of  
interest which received attention was  
that of the awarding of the society's cer-  
tificate at exhibitions. It was voted that  
all committees on awards be instructed  
to report to the executive committee, and  
that the committee act as a committee of  
revision, and no awards shall be made  
without their approval. It is probable  
that a most magnificent exhibition of  
plants, floral designs, also florists' and  
greenhouse requisites will be made at

New York, and it is possible that an  
admission fee will be charged to the gen-  
eral public. This matter together with  
that of securing a suitable hall for the  
meeting and for the exhibition has been  
left to the local committee of the New  
York Florist Club.

After the close of its labors, the  
committee was given a banquet by  
the New York Florist Club. This  
affair was carried out on a scale of  
generosity seldom met with, and was a  
most enjoyable occasion for all who were  
fortunate enough to be present.

WM. J. STEWART.

### The Question Box.

Among the questions already received  
for discussion at the New York meeting  
of the S. A. F. are the following:

Can plants of ixoras and other stove  
plants be grown so that the flowers may  
be sold at a profit?

Is the sale of chrysanthemum flowers  
an injury to the cut flower trade?

What is the best method of preserving  
wood in greenhouses?

What qualifications are necessary to  
become a commercial florist? A private  
gardener? A landscape gardener?

How can we prevent excessive waste  
of fuel?

Is the practice of suddenly advancing  
the price of cut flowers injurious to the  
trade?

What can be done to render hortical-  
tural exhibitions of greater benefit to the  
trade?

Is a wholesale cut flower market desir-  
able in large cities, and if so, which is  
the best manner of conducting them?

Which are the best six carnations for  
florists to grow?

How many varieties of tea and hybrid  
tea roses are necessary for the general  
grower to have and which are the best  
varieties?

Which are the most profitable varieties  
of H. P. roses for forcing?

Which are the best ferns for the gener-  
al retail business?

Which are the best varieties of chrys-  
anthemums for cut flowers?

Which are the best orchids for florists?

What is the best method of propagat-  
ing *Acacia pubescens*?

Which method of circulating hot water  
in greenhouses has been proven by actual  
experience to be the best?

What are the best materials to use in  
building a flue?

Which varieties of recently introduced  
roses are suitable for forcing?

Have greenhouses constructed entirely  
of iron and glass been satisfactory in this  
country?

Are we not going to extremes in carpet  
bedding?

Is the mail trade an injury to the gen-  
eral trade?



Are we not overdoing the forcing of roses for cut flowers?

Does propagating from blind shoots have a tendency to make plants less floriferous?

Will frost kill the larvae of the rose bug and is it safe to spread soil which contains them on the garden?

AT THE MEETING of the executive committee S. A. F. lots were drawn to determine the term of service of the members, since all of the present committee are newly appointed, and the constitution provides that three shall go out of office each year. The result was as follows: For the 3-year term—A. P. Calder, Boston, Mass.; J. M. Keller, Bay Ridge, N. Y.; J. D. Reynolds, Riverside, Ill. For the 2-year term—Peter Henderson, New York; A. E. Whittle, Albany, N. Y.; Chas. D. Ball, Holmesburg, Pa. For the 1-year term—F. R. Pierson, Tarrytown, N. Y.; Henry Michel, St. Louis, Mo.; Wm. G. Bertermann, Indianapolis, Ind.

#### The New York Meeting.

There was much to encourage the friends of the Society of American Florists at the meeting of the executive committee of that society. In the first place, each member faithfully attended all the sessions, and not only was the attendance punctual, but pertinent suggestions were offered by all, which showed that every man was zealous and thoughtful in his support. When we remember the distances traveled by some of the gentlemen, and the valuable time devoted to the discussion of affairs foreign to their business, we must certainly credit them with much interest in the prosperity of the National society. Another fact which proves the disinterested nature of the service rendered was the adverse vote given by the western members of the committee to the resolution allowing them the expenses incurred for berths in the sleeping cars. The only charge to the society will be the actual mileage traveled by each member.

Mention was made at one of the meetings that there are some florists who maintain that the society is managed by a clique whose only aim is to advance their own interests. No impartial person attending any of the proceedings could hold for an instant such a theory. The thought uppermost in all minds was: "What are the best methods to adopt so that all florists may become interested in the welfare of the society, and that horticulture in general may be benefited thereby?" Not only were the members thoughtful as to how they could interest, but they endeavored to make due allowance for all supposed prejudices. It is sincerely hoped that, taking this fact into consideration, no objections will be made at the annual meeting in New York to any proposed action, out of pure opposition; objections raised out of a sincere desire for the society's welfare are always heard with attention, and consideration given to their weight.

Another fact calculated to inspire considerable encouragement is the spirit shown by the local society. This is as it should be, for if the florists of any large city where the convention is held are not aroused to show their appreciation by a hearty welcome, and their professional ability by an exhibition of their skill, we may be sure that the S. A. F. is failing in one of its aims. If we are to judge from the treatment given the executive committee by the New York Florists' Club,

the reception accorded to the convention in August will be a most royal one. Those of our western friends that stay away from the summer meeting will undoubtedly miss not only a most favorable opportunity of becoming acquainted with the progress of horticulture around this section, but also the enjoyment of unstinted hospitality. True, the expense of such a journey to many will be considerable. But, friends, better stint in something else than economize in this particular. Travel broadens and enlarges the mind, and is an educator not to be ignored. It is impossible for any observant man to go from home without seeing something better than he himself has. More especially will this be true when visiting such a place as New York. I am sure that I am not promising too much in saying that all visitors will be gladly welcomed by every florist living in the vicinity of the metropolis.



JOHN E. FEAST

Strenuous efforts will be made to have a creditable exhibition. Of course, it is understood that the time of the year is unfavorable to any great array of fine plants and flowers. Much depends, however, upon the labor of those competent to exhibit. It will be something of a disgrace to the florists of New York if they allow such an opportunity to pass without making a good display. Great things will be expected from us, and we must meet the expectation to the best of our ability. It is understood that some trouble will be given by so doing—labor without any pecuniary recompense. What of it? There is such a thing as professional pride, and if the New York florists have not this pride, let them forever after take second place, and allow more progressive men to pass to the front. But I am sure that by the time of the convention all will be animated by a laudable spirit, and the local committee will not mourn because of the lack of exhibits, but because there is not room to stage them all. As there will be no premiums, no one man will reap any greater benefit than another. Neither can there be accusations of partiality as to judging. Let the display be what it should be, and the public will be interested, and each exhibitor will find this mode of advertising a most lucrative one.

Perhaps it is not out of place to mention at this time the proposition that will be made to the convention to raise the annual dues of the members. The recommendation will be supported by every one

of the executive committee. It is strongly felt that a society of the scope of the S. A. F. should not be so limited in its operations by the want of money. No man can make a good appearance in his business unless he has some capital; neither can the S. A. F. work to advantage unless some funds are on hand to work with. No one wishes for extravagant and unnecessary outlay. The society was not organized merely for the exchange of sociabilities, but that it might be used as an educator. A little reflection will convince every one of the work that an active and competent executive could accomplish. Many inquiries are constantly being made as to the desirable qualities of the various new plants placed in the market. With sufficient funds available, experiments could be tried and reports made to each meeting of the varieties worthy of notice. Experiments with insecticides, soils, fertilizers—all could come within the work of the society. At once, some one says: "Such a scheme would be controlled by the few who introduce new plants, entirely for their own profit." It is a sufficient answer to say that all rings can be abolished whenever the voters choose. No few men can control a society if an interest is manifested by all. Every one has equal rights, and there is no stuffing of ballot boxes.

In connection with this subject is the experiment that was tried of detecting those florists who fraudulently substitute inferior and common varieties for others rarer and of higher price. This trial has only been partially successful, owing to the deficiency of funds preventing a thorough test of all suspected parties. It is most surprising to find to what an extent this flagrant abuse of confidence has been carried. No one would willingly condemn another for a mistake. All are liable to errors, for much has obviously to be left to employees; but when men willfully seek to defraud, exposure should overtake them. Responsible dealers should be in earnest in helping to ferret out rascality, for while the system of substitution is pursued by some, all are equally liable to censure. The worst of the matter is that the injury is generally sustained by the inexperienced and usually poorer florist. An attempt is seldom made upon those who are supposed to be experienced, and who would be likely to at once detect the fraud. When men of no experience buy from us, every endeavor should be made to win and retain their confidence. No matter what the business, it always pays to be truthful. May this stigma soon be wiped away from the reputation of the American florists, and that every one will make it a rule to sell his goods by honest representation.

Interesting topics for essays have been assigned to competent men, the subjects selected being all of practical value, and the reading and discussion of which will be sure to increase our information. The question-box will be given a prominent place, as it was found to be of general interest at former conventions. In conclusion, it may be said that the summer meeting promises to be most successful, and that all who attend will be well repaid for their trouble.

ALFRED E. WHITTLE.

**FINE VIOLETS.**—Some excellent violet blooms have been received from Chas. F. Seitzer, Utica, N. Y. They were of good size and rich color, proving excellent culture. The foliage which accompanied them was apparently free from disease.



ASA GRAY.

### OBITUARY.

PROFESSOR ASA GRAY, America's most eminent botanist, passed away at his home in Cambridge, Mass., Jan. 30, at the ripe age of 77 years. The first notice of his sickness was Nov. 28, when upon attempting to raise his arm he found it impossible, and it was soon discovered that paralysis had developed to such an alarming extent that it was a question of but a short time when this master mind and robust body must leave their life's work and pass beyond.

Asa Gray was born at Paris, Oneida county, N. Y., Nov. 18, 1810. At the age of 20 he took his degree at the medical college in Fairfield, N. Y. Early in life he gained the friendship and assistance of Dr. John Torrey, the professor of chemistry in the College of Physicians and Surgeons in New York city, and at that time the leading botanical writer of America; and in his intercourse and correspondence with this eminent man Asa Gray doubtless laid the foundation for his own brilliant career. With Dr. Torrey he was afterward associated in the preparation of the earlier numbers of the "Flora of North America." The ten years following his college course were spent mostly in and about New York city, with the exception of one year spent in Europe; and the results of these years of study and research are seen in the many valuable contributions to the botanical literature of the day which appeared over his name.

In April, 1842, Prof. Gray was appointed to the chair of the Fisher professorship of Harvard college. He took up his residence at the Cambridge Botanic garden—then a botanic garden only in name—and from that time till 1872, when he re-

signed the position, his time and best efforts were abundantly employed in college lecturing and teaching, the direction of the botanical garden, writing of many valuable works, and to the collection and preparation of his magnificent herbarium. This herbarium, containing over 200,000 plants all carefully classified and arranged, together with his library, the finest of the kind in this country, and containing more than 2,200 botanical works, were presented by Prof. Gray to Harvard college in 1862. Since being relieved of his college duties Prof. Gray has devoted his time assiduously to the care of the herbarium and to his work on the "Flora of North America," which, with Prof. Torrey's co-operation, he had begun nearly forty years before, and which the botanists of the world have hoped that the gifted author would live to complete.

One of the most remarkable features in Prof. Gray's history is the almost incredible amount of work he has done. It is well to remember that scientific botany is not yet 150 years old. Indeed, it is only within Asa Gray's time that any attempt worthy of the name has been made to classify the plants of North America. His labors in this direction alone would seem to be a lifetime's work for one man, yet his name is known in every field of botanical study; his essays, reviews and critical notes have appeared in numberless magazines and periodicals, and, best of all, he has, through his manuals and elementary text-books, placed botanical knowledge in the hands of the school children in such a simple and agreeable form that even the youngest are entertained and instructed. Referring to these text-books Prof. C. S. Sargent has said (writing to the *New York Sun*): "This book (Gray's

Manual), written in a plain and simple language suitable to the use of all persons desirous of becoming acquainted with the plants of this country, has greatly stimulated the study of botany in the United States. Its influence can hardly be estimated or overstated. For thirty years and more it has been the well-thumbed companion, friend and guide of every botanist and botanical aspirant who has explored the flora of the eastern States." And in reference to the two juvenile treatises "How Plants Grow" and "How Plants behave" Prof. Sargent says: "Nothing written by Prof. Gray has ever better displayed his peculiar ability to explain difficult scientific subjects in the simplest and clearest language. These two little books may well demonstrate, if demonstration is necessary, the often repeated, and as often disregarded axiom, that only the great masters can write the simple and elementary treatises." \* \* \* "Prof. Gray, through this long list of educational publications, has been able to exert a remarkable influence upon the growth and development of botanical science in the United States. It would be difficult to point to any other scientific man, with the single exception of Chas. Darwin, who has in his own department of learning so entirely impressed himself upon the intellectual growth of a nation."

### Death of John E. Feast

It is with feelings of profound regret that I record the death of Mr. John Edward Feast, which occurred at his residence, near Baltimore, early on the morning of Jan. 30. Mr. Feast's death was very sudden. He was at his store in town, hale and hearty, up to a late hour on Saturday evening. On Sunday morning he felt somewhat indisposed, and although feeling more or less unwell during the day, declined to see a doctor. Late Sunday night, however, he grew very much worse, and a physician was summoned, but before he could arrive Mr. Feast had breathed his last. The announcement of his death was a severe shock to his many friends, and particularly so to his brother florists. He was respected and esteemed by all who knew him, but his love for horticulture, and his enthusiastic and unselfish support of every measure tending to elevate public taste and advance his profession, bound John E. Feast in a special manner to his fellow craftsmen. Mr. Feast was a thorough business man, full of energy, and a perfect master of his profession. In manner he was brusque and abrupt, but under this rough exterior he carried as warm and generous a heart as ever beat in human breast; ever ready to alleviate distress and aid the needy, especially those of his own craft, yet giving without ostentation.

His death opened the first breach in the ranks of the Gardeners' Club, and a special meeting of that body was convened by President Halliday on Jan. 31 to take suitable action on the death of their late associate. Mr. James Pentland, a life-long friend of Mr. Feast, made a very touching and eloquent address, after which appropriate resolutions were adopted.

John E. Feast was born Jan. 12, 1828, and had just passed his sixtieth year. He was descended from genuine gardening stock, his father, Samuel, and his uncles William and John being virtually the founders of the florist business in Baltimore. To Mr. Jas. Pentland, who was intimately acquainted with the



original firm, I am indebted for the following brief but interesting particulars: John and Samuel Feast started the florist business in this city about 1835. As already stated, they were the pioneers of the business here, and enjoyed a complete monopoly of whatever business Baltimore afforded at that time. The firm after a time dissolved, and Samuel opened another establishment in the country, and also a store and greenhouse in the center of the city for the sale of plants, flowers and seeds. Samuel had three sons—Samuel, William and John E. All three assisted their father for a time, William ultimately going to California. After the death of Samuel, Sr., the business in town was conducted by Samuel, Jr., John E. attending to affairs in the country. About sixteen years ago Samuel, Jr., died, and since his death the entire business has been conducted by the late John E., under the original firm name of Samuel Feast & Sons.

The funeral took place on the 1st inst., and was largely attended by business men and private citizens of this city and county. The trade was largely represented, and a special committee appointed to represent the club assisted in laying to rest all that was mortal of their late associate—one who might be said to represent the rise and progress of floriculture in this community, and who for over half a century was closely identified with the interests of the trade in Baltimore. He leaves a widow and three children.

A. W. M.

A FRIEND who was intimately acquainted with Mr. Feast writes: "The sudden death of one of Baltimore's oldest and most prominent florists—John E. Feast, has caused the deepest sorrow, not only in this city, but throughout the state. His portrait will undoubtedly recall to many readers of the *FLORIST* his genial and attractive manners, as well as his sterling character, by the very lines of his frank features, so well known to nearly every Baltimorean. He was born and reared in this city, where his family have for more than half a century, under the firm name of Samuel Feast & Sons, been identified with the horticulture of both Maryland and adjoining states.

Like his father, Samuel Feast, who was probably the first and best botanist in Maryland, and famous in his day as a cultivator of camellias especially, J. E. Feast was an acknowledged expert in his profession, and possessed the highest acquirements in the art of horticulture. His bereaved family received tokens of condolence from all parts of the county where his sudden death had been announced. He was long a member of the executive committee of the Maryland Hort. society, and an almost invariable exhibitor at its shows."

FRANCIS MORAT.—This well-known florist of Louisville, Ky., suffered a stroke of paralysis Jan. 27, and his death followed shortly after. He was 57 years of age, and was to all appearances in the best of health at the time. He was one of the pioneers of the trade in Louisville, and was widely and favorably known to the trade throughout the west. A sketch of his life will appear in our next issue.

NEW ORLEANS.—This city has a florist 77 years of age in the person of V. Valentine. He has been here thirty-five years, and only recently retired from business.



Vanda Cœrulea.

The photo of Vanda cœrulea shows a group of that beautiful orchid. The only difference in colors being variation from dark to a beautiful light blue.

Some growers recommend this variety to be grown in a warm house, others in a cool temperature. These plants were grown in an intermediate house, and for size of flower and length of racemes have hardly ever been equaled in this country—so say the critics on orchids.

The treatment of these plants is very simple. Pot them in green sphagnum, with pieces of broken charcoal, filling the pots three parts full of potsherds. Keep them moderately moist all the year, with plenty of water sprinkled in between the pots in the summer months, but very little overhead at anytime of the year. They seem to do best placed on bare benches, without sand or any material that will hold the water too long. The best roots being found clinging to the benches.

This handsome orchid would be a very profitable one for florists to grow.  
Rochester, N. Y. GEO. SAVAGE.

#### Raising New Plants.

BY W. N. FALCONER.

Most every florist in the country wants to raise something new and good, and have the pleasure, honor and profit of distributing it; but some who would like the honor and the profit can't be bothered with the work. Behold our progressive seedsmen and florists: Year after year their catalogues teem with something new and striking, something absolutely their own, something the stock of which is controlled solely by themselves. And in addition to real new varieties or species, see how they exert themselves to obtain extra fine selections of old varieties—just enough to have an excuse to append their name to them. They must keep their name before the public. And in order to captivate the public, they have got to offer something new, something that the public want, something that the people will talk about and must have. And it's the man who offers the most, displays them to the best advantage and advertises them the wisest, who sells the most. If it didn't pay, our florists wouldn't do it. But can't we overdo the thing? Never, with good things. But knowingly offer old things under new names, rubbishy things of any sort, or mislead the public by false descriptions, and the public will find you out, and the trade at least list you as you deserve.

But if we raise new varieties, can we sell enough of them to make it pay? Decidedly we can. Let the new things possess sterling merit, and the next year after it is sent out, every progressive florist in the country is almost compelled to catalogue it. If Brown hasn't catalogued it, and Smith has, and Brown's customers want it, do you think they will hesitate a moment to send to Smith for it? Indeed they won't. And don't

for a moment think that it is the green-horns and the "lamb's" alone who buy the new plants; not at all. Every florist and advanced horticulturist must have it, if for no other reason than to see it and know what it is. Take Taplin with his bride rose, Thorpe with his carnations and geraniums, Henderson with his mammoth verbeas, Such with his pitcher plants, Harris with his chrysanthemums, and Zirngiebel with his asters—don't you think they made money out of them? I should think they did, and a reputation too.

Or from among the vast resources of the vegetable kingdom can't we get hold of some plant that would be a decided acquisition to horticulture, easy to propagate and grow? Many have already been introduced to cultivation, lived in our gardens for some time in a desultory way, and now passed into oblivion. Re-introduce some of these; grow them and show them in their gorgeous grandeur; then get up a stock of them and boom them with all your might, and get the credit and reap the harvest that your enterprise deserves. The "Moonflower" is one of these plants. I have grown it uninterruptedly for a dozen years, but it took Peter Henderson to give it to the people. But many fail with and repudiate this plant; but the fault is theirs and not the plant's.

The El Dorado African marigolds introduced a few years ago by John Thorpe were as "old as the hills," still unknown in our gardens. Where are they to-day? In every village in the land. If Fields had not discovered the merits of the American Beauty rose, the chances are it yet should be unknown. It may be the Mme. Ferdinand Jamin, as Europeans claim, but under this name for greenhouse use it is little known or called for in this country. Therefore to Fields let us ascribe all the honor for introducing to our practical notice this popular and indispensable rose.

One of the chief points to be observed in rendering a new variety popular, is its name. Give it a short, easy-to-speak, happy, expressive name, if you wish everybody to want it. What a happy name for a rose is Sunset! What an expressive one is Bride! If you wish to make money out of your new plants, I believe there are more dimes in the name Snow-storm (for that lovely white chrysanthemum) than there would be pennies in Mrs. Smith, which might mean any kind or any color of chrysanthemum. And above all things, avoid Latin names. Because you used to go to school and we didn't, because you are educated and we are illiterate, is no good reason why you should blast your own profits and our comfort by imposing on us murderous, meaningless (to us who don't understand what you are talking about) names. True, every species must have a botanical name, but a garden variety has no need of it. And even in the trade it would be better for our profits if more English names were used when referring to species.

Well, what shall we raise? Try something. Carnations, show pelargoniums, chrysanthemums, gloxinias, achimenes, double petunias, begonias and many other plants afford us an easy field. All of these are popular plants and easily raised from seed, and by perseverance, persistence, cross-fertilization and continued selection, you may after a while get something good and distinct enough to repay you for all room, time and pains. And when you get it, don't hide it under a



A GROUP OF VANDA CCERULEA IN MR. WM. S. KIMBALL'S CONSERVATORIES, ROCHESTER, N. Y.

bushel and think people are going to run after you for it, because they won't. Hovey raised some of the finest camellias ever produced (indeed, I believe C. M. Hovey is yet the finest variety extant), but he held on to them when they were popular, nobody wanted them when they were out of fashion, consequently he never made any more money out of them than he did out of his other common stock. He also raised the finest *true* hybrid lily ever produced, but made nothing out of it, simply because he held on to it; while the Parkman hybrid after the same fashion—but with a poorer constitution than the Hovey lily—and raised about the same time as was Hovey's lily, was disposed of to an English firm for, as lilies go, an almost fabulous price. The Degraw rose—an autumn-blooming outdoor variety in the way of *Hermosa*—of merit in its way, was raised here in Glen Cove some thirty years ago, and has never yet got beyond this village, because the raiser held on to it. If you will succeed in business, as soon as your stock is available turn it into money and keep turning it, and don't keep anything on or about your place that you can't turn into money.

But it isn't from seed alone that we get

new plants. "Sports" often occur on garden and wild plants; then be diligently observant and take advantage of these. In this way most of our variegated leaved plants have been secured. And in chrysanthemums, carnations, poppies and zinnias it is not uncommon to have flowers of different colors appear at the same time on the same plant.

But as our own plants, like our own children, in our own eyes are apt to be seventh wonders, and not at all wonderful in anybody else's eyes, wouldn't it be well if we had some competent body of horticulturists, centrally located, to adjudicate, certify if deserving, and report upon such exhibits—something that would be unto America what the floral committee of the R. Hort. society of London is to England?

#### "A Secret."

Said a florist recently, "The AMERICAN FLORIST is of incalculable value to me; it is chock full of just the information that I want." Still, while some of the recommendations made by well-known writers in the FLORIST had been acted upon by the speaker, many had not—and those too which might very readily have

been without any expense other than a little care and labor.

All the knowledge possessed by the best plantsman in the world would profit him nothing if he failed to make a practical application of it to his work. The acquisition of knowledge is one thing, and the practical application of it is decidedly another. Are you making practical use of the information which is twice each month laid before you by the FLORIST? If not, the knowledge acquired from it is of little value to you.

Do not imagine for a moment that you can adopt without variation all the methods described by successful growers. Their methods must frequently be varied and changed to meet the special requirements of your own conditions and surroundings. To do this successfully what is commonly known as "good horse sense" must be exercised, and without it no continued success can be had. The "secret" lies in a careful study of cause and effect—bearing in mind the fact that a cause or combination of causes which may produce a certain effect under certain conditions, may produce a decidedly different effect under other conditions—and sparing no effort to supply the conditions which have been demonstrated by experience to be most favorable.





At Chicago.

At the McCormick rose houses, at Lake Forest, the condition of the stock is first-class. In conversation with Superintendent Sidney Clack the following points were noted as to his experience with certain varieties, and his methods:

He finds that the Bennett does best with a little lighter soil than most other roses, also that it appreciates a little more heat, and that the plants should be kept farther from the glass.

He ties all his *Am. Beauties* down, to induce them to break along the canes; he does not pinch off the point of the shoot, finding that they break well enough without if the canes are tied down nearly horizontal. He prefers to keep this rose indoors during its whole existence, as when placed out of doors even for a short time during summer, he obtains a crop of black spot, which does not appear when the plants are kept in the house. When tied down he cannot secure as long stems to the buds, but obtains a good paying crop of buds with stems of fair length. He grew the rose last year without tying down, but obtained so few flowers that he could not afford to grow it in that way.

*Comtesse de Frigneuse* and *Souvenir Gabrielle Drevet* have been tried this season for cut flowers, but they have so far proved very disappointing; both varieties have consumed themselves with mildew, and they are in a house of *Mermets*, upon the plants of which latter variety not a trace of fungus can be seen.

A house of *La France* is producing an abundance of magnificent bloom. Mr. Clack does not water his *La France* as heavily as other varieties.

He uses from three to four inches of soil in the benches, and considers three inches better than four, but his soil is clayey and of a retentive character. As regards the depth of soil in rose benches, it is the opinion of the writer that the texture of the soil should govern the depth. If the soil is heavy, a slight depth is undoubtedly the best, as the plants can be syringed more frequently with less danger to the soil becoming sour, and the plants must be freely syringed to keep them in best condition. With a very light soil, however, the depth should be greater, otherwise it would be almost like pouring water into a sieve to keep the bed properly moist.

Mr. Clack believes with Mr. May that roses should be propagated later than January, and designated March as the month in which he would make all his cuttings, if sufficient wood could be had to do it all in one month. As it is, he is commencing to propagate now, and will continue till April or even May, if sufficient stock is not secured before. In propagating, he uses very coarse sand and does not trim so much foliage from the cutting as is usually done. He has no preference as to wood, provided it be ripe; considers that both blind and blooming wood make equally good plants, and has demonstrated the same to his satisfaction. He has a house of *Mermets* which are in excellent condition,

and the plants are from cuttings placed in the bench May 11 last. The plants are therefore but nine months old, and they have produced the best flowers of any of his *Mermets* houses, as well as an equal quantity of buds.

A house of *Perles* shows a distinct difference in strength of growth in the two halves of a center bench. Half of the plants were grown on in the house from the time they were struck, and the other half were plunged out of doors for six weeks during the summer when in 4-inch pots. Those which had the outdoor treatment show much more vigor than the others, and produce fewer deformed flowers.

He grows new stock every year, and there is not a 2-year old tea rose on the place. Not only is the soil in the benches removed, but the benches are all carefully scraped out, and the boards treated to a coat of whitewash or petroleum each year. He considers horse manure a poison in the soil for roses, feeling assured that it creates a fungus very destructive to the rose under the conditions existing in the forcing house.

Owing to an accident to one house last year, he replanted it Jan. 18, 1887, with small 2½-inch pot plants of *Mermets* and *Perles* entirely from blind wood cuttings; they have bloomed splendidly, and now average seven feet in height, well dressed with foliage down to the bench. The writer never saw a house of roses in better condition than these; they were certainly magnificent.

He does not prune his tea roses. His motto is to "keep them growing *without a check* from the time they are potted off until thrown out the following year." He considers that if the growth of the plants once suffers a check, no after treatment can make it the plant it would have been had not the check occurred. Perfect cleanliness in the houses, continued watchfulness, attention to every detail however small, sufficient help to keep always up with the work, and prevention rather than cure, go to make up the sum of his success, as it undoubtedly does with all who attain it.

#### Bon Silene and Gontier.

The question now agitating most rose growers is as to whether the Gontier will take the place of *Bon Silene*. For my part, I am inclined to hold on to our old friend, the *Bon Silene*. I find that it pays as well as any rose I grow, and this year the buds are selling better than ever. So far, I have been able to cut quite twice as much bloom from a given space of *Bon Silenes* as from the same of *Gontiers*. I would not for a moment condemn the Gontier, for there is certainly room for it, but I would advise florists not to pitch out all their *Bons*. Pennock Bros. informed me some time since that a lady who ordered *Bon Silenes* would not accept *Bennetts* or *Gontiers* as a substitute, though offered at the same price, saying that she preferred *Bon Silene*, on account of its fragrance. Philadelphia. W. W. C.

#### Experience with the Newer Stocks.

I have grown *Comtesse de Frigneuse* for cut flowers for the last two years, and find it a rich bloomer, producing buds full as freely as *Niphetos*, and of a better color than *Perle des Jardins*, but smaller in size, not so full and on a more slender stem. In the bud state the blooms are not smooth enough, though always opening well—and when open they are rather

loose. I do not think it will ever take the place of the *Perle*, even if the latter does give a good many poor flowers.

Of all the newer roses, I think *Marchal Robert* ought to be grown far more. *Madame Watteville* has done better with me than *Mme. Cusin*; the color liked better, and it blooms very free with me. Hamilton, O. THEO. BOCK.

#### The Rose Bug.

ED. AM. FLORIST.—R. B. in the *Jauuary* number, tells us that by the use of chickens in his rose houses he has completely "bounced" the rose grub. I can understand how the chickens may have helped to "bounce" the mature insect—the "bug"—but if the "grub" was present and on the roots, where it always is when it gets in its deadly work, I am at a loss to understand how the chickens get at it without making the cure as bad as the disease, for to get at all the grubs on the roots, the chickens must first have laid bare the roots to their extreme points. Will R. B. please say whether the chickens, by destroying the bugs, simply prevent the increase of the "grub," or if the "grubs" are present, how they are got at by the chickens without injury to the roots?

PETER HENDERSON.

Jersey City Heights, N. J.

#### That Nyack Soil.

Whether the rose growers will "corner" the famous rose soil of Nyack, N. Y., or not, remains to be seen, but it is reported that an enterprising Philadelphian has bought an acre and proposes to "float" it to the Quaker City. H.

MADAME WATTEVILLE.—This rose is being largely forced by several New York growers with great success and it meets with ready sale at good prices. Some large growers are going into it very heavily.

#### The American Beauty.

No rose introduced within the last decade has won such universal favor as this, be its name *Madame Bellon*, *Madame Ferdinand Jamin*, or anything else in the way of *Madame*. During the convention in Philadelphia in 1886 I was assured by a florist in the best standing, and a man of excellent judgment, that *Am. Beauty* was *Mme. Bellon*, which was introduced thirteen years before. Now we are assured from other sources that it is *Mme. Ferdinand Jamin*. No matter what name they may wish to call it in other countries, here under the Stars and Stripes it is and will be *American Beauty*, and I cannot see that the introducers of it in this country are in any way to blame, even if it should prove to be an old variety renamed. They (the Messrs. Field Bros.) bought the original plant in good faith, supposing it to be something new, but not really knowing anything of its actual value till they had grown it two or three years; then it quickly developed itself into a rare beauty, soon winning universal admiration on all sides, and to-day it is most emphatically the most popular of all the large roses in the country—in fact, it is gaining in favor all the time.

Some of the European writers who claim it is *Mme. Jamin* criticise our taste in America, saying that it is a coarse rose, of very poor color, and a very poor grower. I think, could these





THE AMERICAN BEAUTY.

writers see the rose in this country during our winter months, with its bright color, its generous foliage, its fine long stems, its superb form and size, and then inhale its delicious fragrance (which, if they could see the flowers and their nasal organs were not out of tune, they could not help getting its perfume with the sight), I think they would not be quite so certain about our poor taste in regard to fine roses. Let other countries say what they like of us and our roses, the American Beauty is here to stay, and no other rose in our markets to-day will command the price this variety does. Before its introduction General Jacqueminot, Anna de Diesbach, Magna Charta, etc., used to bring as high as \$12 and \$18 per dozen; now fine flowers of these have to quietly sit and wait for customers

at \$3 to \$6 a dozen, while fine blooms of the Beauty are taken at sight at more than double those figures.

The accompanying plate is a very good representation of this rose. While the Beauty may not be as profitable to grow in the smaller towns for local trade as the tea roses, yet where it can be disposed of at reasonable prices, it is as profitable to grow as any of them, providing of course it is handled rightly. I am often asked the question: "Will the Beauty succeed well with other varieties in general?" To all such I would say decidedly no; it may be grown in the same house with some varieties of teas, but it should have its part to itself; where possible, give it a house by itself—it will do better so.

The treatment which has suited it best

with me is to plant out nice plants on benches in July; soil not more than five inches deep—three and a half is much better. Grow them on liberally, picking off all buds as soon as large enough to see, till October. About the end of September bud all strong shoots over and tie them down to within a foot or fifteen inches of the ground. This induces them to break good and strong from the base of the plants, and the bulk of them will throw up from two to six buds, with stems fifteen to twenty-four inches long. As soon as the bulk of the crop is cut, water is gradually withheld and the temperature slightly reduced till the soil becomes fairly dry and the night temperature gets down to about 48°. After about two weeks of this treatment, which slightly rests and hardens the wood, they are gradually watered a little heavier each day, and the temperature slightly increased in proportion, for about two weeks more, till it reaches 55° to 56° at night. During the resting period they get all the air possible consistent with healthy conditions. By the time the temperature again reaches 56° at night, they will have all broken nicely from the base again, and will produce another good crop.

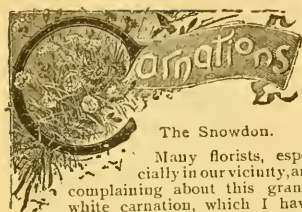
The time the buds are most in demand should be the objective point with the grower, and he should start preparations accordingly. During the winter months there will be a period of eight to nine weeks from one crop to the other when treated as described, and if a crop is desired at Christmas, the first crop should be cut off by about the 20th to 24th of October. As the days lengthen in spring, they come somewhat quicker—six to seven weeks between crops. During the season of 1886-'87 I treated one house this way, and for the months of October, November, December, January and February it paid me considerably better than any other house of roses I grew. After that date the plants were cut back considerably for cuttings. In comparison with this house

I had another of American

Beauty—an exact counterpart in every particular—but the plants were allowed to grow up straight like other roses. This did not produce so many buds by 60 per cent. One thing should be borne in mind by those wishing to try this variety—that is, it will not produce as fine a quality of flowers at a temperature of 60° at night as it will at 56°, but it will produce more blind shoots in the higher temperature. Another point is that when in active growth it needs liberal treatment in the way of water and a light mulching of fine manure on the surface will not hurt it. J. N. MAY.

SOIL FOR PALMS.—Will some one tell me, through the FLORIST, what soil is best for palms? A FLORIST.





### The Snowdon.

Many florists, especially in our vicinity, are complaining about this grand white carnation, which I have found to be the most floriferous of all, and have never experienced any trouble in growing, no difference in what soil they were planted. I have been growing it as my favorite for the last four years, and would not part with it for all the rest of the white sorts. Glancing over a bed of them in the greenhouse, nothing but flowers and buds are to be seen, and they have been blooming continuously since October, with prospects of a steady bloom till spring. Some florists say it is a very good variety for the grower, but not so good for the dealer, as it is smaller than the rest of the whites; but I assert that if the flowers are left on the plants until they are fully expanded, they will compare favorably with the average carnation floret. Even if they should be somewhat smaller, is it not to the grower's advantage to grow plants that are more productive than others, especially when the flowers bring the same price? We never have any trouble getting as good a price for Snowdons as other florists do for other sorts.

The plants produce plenty of cuttings, which are easily rooted, and the main feature about them is that they require no stakes, being a true dwarf, therefore requiring less labor, and they can be planted on any low side benches where other sorts could not be placed, as they grow no higher than six or eight inches. The first two years I grew them in a very light soil, and they did very well, but since planted them in somewhat heavier soil, but could see no material difference in their growth. When lifting in the fall I try to keep a good ball of earth on them, and transplant in soil composed mainly of old hotbed manure, in which they seem to thrive best with me. Liquid manure is never applied until after the holidays, when they are somewhat exhausted; then they are fed every ten days with liquid cow or chicken manure. The latter is the best, if used judiciously. The temperature of the house ranges from 55° to 60° at night.

Pittsburgh.

E. C. REINEMAN.

### Treatment for Forcing.

For five years past I have grown and forced annually about 2,000 plants of the following sorts: Snowdon, Black Knight, Hinsdale, Philadelphia, Hinz's White and Edwardsii, and rarely lose a plant, either in the houses or out.

I propagate my young stock by Dec. 1, before the plants have been forced much and while we have plenty of room and time. As soon as rooted they are potted in thumb-pots and kept in a temperature of 50° to 65° till Feb. 1, when they are planted in flats. About an inch of rotten manure and a little soil is placed in the bottom of the flats, and the young plants with ball of earth intact stood quite close together—say 100 in a flat made from an ordinary soap-box—and the interstices filled with soil. They are kept in the same temperature until early in March, when they are placed in a cold house

without fire heat, first pinching the tops to make them branch. By April they are set outside in a shaded place, still in the flats, to further harden them. If a little snow falls on them it will not harm them. Just as soon as the ground can be worked they are planted out—we change our location for planting every year. Plenty of good barnyard manure is the best fertilizer. I don't think there is much gained by having the plants extra large in size.

In regard to Hinz's White, I have a house of it which is kept very cool, and by March it is a perfect mass of buds, continuing so until July 1. Those forced go out of flower earlier. A plant will apparently produce a certain quantity of flowers and no more; you may vary the time of blooming to some extent, but the quantity of bloom cut will be about the same.

I like the Black knight; it comes mostly with long stems—but bear in mind that a grower should get double price for long stems, as the cut of short-stemmed flowers will always be double that of long-stemmed ones. Plants which are grown and bloomed in a cool temperature produce by far the largest flowers. I do my watering early in the morning on bright days, and only when the soil is quite dry—then I soak them thoroughly. I will at a future time advise as to soil on benches, etc.

Westfield, N. J. W. B. WOODRUFF.



RELATED INDIVIDUAL (slightly out of his proper course): "Faith, the crust on the snow is amazin' strong here! Oi didn't know it wuz freezin' so hard or I wud av worn me heavy coat."—Fuck.

### How it is Spelled.

I want to know the correct way of spelling the name of a well-known white carnation. In looking through a number of catalogues from leading florists I find it spelled in various ways: One has it "Hinz's White," another has it "Hintz's," still another "Hinzey's," a fourth has it "Hinzie's," and a fifth "Hieintz's." Which, if any, is correct?

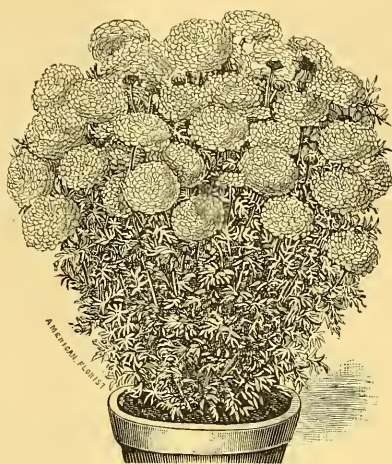
[It should be spelled "Hinz's White," the variety being named after Mr. Rudolph Hinz of Detroit, Mich.—Ed.]

CARNATION MRS. CLEVELAND.—This is a new pink variety raised by Edwin Lonsdale of Philadelphia. It is a seedling from Grace Wilder; the color being brighter than that variety. Its great value, however, lies in its remarkable freedom of bloom.

### Odds and Ends.

The writer has several times of late heard the opinion expressed that the day was at hand when annuals and herbaceous plants would be so popular for summer decoration that we would cast out our coleus, alternantheras, etc., and betake ourselves exclusively to cultivating the sweet Williams, the four-o'clocks and Job's tears of our grandmothers, but I don't apprehend any such change in the order of things. Every private establishment of any pretensions ought to have a corner devoted to herbaceous plants, and the commercial florist who has a bit of ground to spare might do worse than fill it with the most popular hardy stock. Amongst annuals we have many varieties that we could not well dispense with, but taken altogether, few annuals or herbaceous plants are suitable for the production of lasting effect during summer. What we really need is not so much additions to our stock of bedding plants as more variety and art in our arrangements. I have in my mind's eye places where the bedding each summer is little more than a repetition of the previous season. Establishments where the hedding every season is marked by some novel and attractive feature are like angels' visits, few and far between; indeed, as regards too much of the bedding out seen from time to time, I am not unfrequently tempted to express my opinion in the one word "Chestnuts," were it not that I am opposed on principle to the use of slang. We have reached a high standard of art in other departments. In our floral work, for instance, effects are now produced that our most modern ancestors never dreamed of. Beautiful and artistic effects in summer bedding are equally possible—we have had ample evidence of this—if proper efforts are put forth. I certainly do not admire the stiff, harsh outline style of hedding. I recall with pleasure a bed of Golden Bedder coleus with several plants of Impatiens sultana dotted over it, and another of Royal Velvet coleus with El Dorado marigold interspersed. Such effects are pleasing and easily obtained. There is just one other point applicable to all bedding operations, and that is careful attention all through the summer. No matter how excellent our designs or how carefully planted, we cannot attain successful results unless the necessary trimming, pinching, etc., be carefully attended to and done at the proper time.

At a recent meeting of the club, in answer to a query as to the best method of destroying scale on camellias, President R. J. Halliday gave two remedies, which may be of service to some reader of the FLORIST. No. 1 consists of one pint kerosene oil, one pint milk and twelve quarts hot water; this to be applied hot, with a syringe. No. 2 consists of one pound quicksilver and three pounds of tallow, well mixed together, and a ring or band of the paste fastened round the stem of the plant; in the case of large trees, some of the branches may also receive a slight dressing. Mr. Halliday found the latter remedy particularly efficacious; the quicksilver penetrates all through the tree, and the scale become so tired of feeding on camellia that they drop to the ground disgusted and dead. Mr. Whilldin of Philadelphia was present at the last meeting of the club, and predicted that so far as unusually large orders for flower-pots could be taken as a criterion, the coming season would be a brisk one indeed.



ANTHEMIS CORONARIA, FL. PL.

Few flowers were more in demand here last fall than the pretty *Cosmos hybrida*. It was not very generally grown. Mrs. Mary Thomas having the principal stock of it, enjoyed quite a corner in cosmos. The flowers are not unlike *Anemone japonica*, and come in different shades of crimson, purple and white; they can be cut with long stems, and last well after being cut. Seed sown in spring will bloom the following fall, and no florist who can possibly spare the ground should fail to grow a few plants. Having once tried it, I am positive he will grow it again. It is soon injured by frost, but if protected outdoors or moved into a cold house, its season of bloom may be prolonged considerably.

*Cineraria hybrida* is, to my mind, one of the prettiest plants of its kind, whether grown for conservatory decoration or for marketing; it always sells, if decently grown. Like the chrysanthemum, cinerarias should never be allowed to suffer for water or become pot-bound. The latter is certain to make both foliage and bloom poor. As a matter of course, the commercial grower can't well afford them the necessary growing room, but a plentiful use of liquid manure will help to lessen the evils of their cramped existence. Green fly is a persistent enemy of the cineraria, and as the plants appear to be easily injured by fumigating, the best plan is to spread tobacco-stems between the pots. A. W. M.

Baltimore, Md.

#### Anthemis Coronaria, Fl. Pl.

This valuable plant was introduced several years ago, and is now appreciated by many, but its merits are not so widely known as they deserve to be; it is not only one of the best yellow bedding plants we have, but is also extremely pretty as a winter-flowering plant in the greenhouse or in a sunny window of the dwelling. Its leaves resemble the foliage of the common chamomile (*C. nobilis*), but are shorter and somewhat thicker, and the plant itself is of more compact growth.

The flowers are bright yellow, from one to one and a half inches in diameter, and in shape and formation resemble the double variety of the common daisy (*Bellis perennis*). It thrives well in any light rich soil; in wet seasons in heavy soils it sometimes rots off, but in a suitable soil it grows well and flowers freely all summer. As a pot plant for spring sales it is one of the most desirable plants we know of.

ROBT. CRAIG.

#### New York Notes and Comments.

The information that Mr. James R. Pitcher's greenhouses at Short Hills have been seriously damaged by fire will be received with much regret, both by the many friends of that gentleman and by all lovers of fine plants. The fire, which occurred on Jan. 28, was most probably caused by an overheated chimney. The loss is in many respects irreparable; it includes the Wilder collection of camellias, which cannot be replaced. The fine azaleas and other greenhouse plants are destroyed, and the loss among orchids is very considerable. The destruction of many cypripediums which were maturing seed, the result of careful hybridizing, is particularly to be deplored, as well as the loss of a large number of unique specimens. The fire included the show-house, which contained most of the plants in bloom, as well as a lot of fine nepenthes, crotons, anthuriums, etc. The fine gladiolus plants were also destroyed; in fact, the destruction seems greatest among the most valuable plants. Mr. Pitcher is the recipient of many hearty expressions of sympathy from his large circle of horticultural friends. He will begin rebuilding at once. The loss is computed at about \$25 000, partly covered by insurance.

Siebrecht & Wadley will hold their second orchid show at the Eden Musee this month, opening on Feb. 16, and lasting until the 22d. It is rather earlier than last year, experience having proved that a greater display can be made now than a few weeks later. It is likely to be a very fine display. There will be ex-

hibits from many of the great orchid fanciers, in addition to the plants from Rose Hill nurseries. Among the attractions we are promised some fine pieces of *Oncidium sarcodeum*, a very showy variety which, without being an absolute rarity, is sufficiently scarce to be a decided attraction. A fine lot of *Oncidium Cavendishii* will also be of interest, and some masses of late-flowering *laelia*s will make a fine show. Mr. Foersterman, who represents F. Sander of St. Albans, has cabled over to the home establishment for some 200 *Odontoglossum crispum* (Alexandre) just coming into flower. The only flowers shown besides orchids will be a batch of the Rose Hill strain of cyclamens; the chief interest will be centered in the orchids.

Those artificially colored carnations which were shown at the holidays have been followed by other flowers "made up" in the same way. Really, they come under the same head as Roman pearls and Rhinestone diamonds; speaking from a standard of severe taste, they must certainly be condemned. But in some cases the dyeing process is done so cleverly, and with such regard to the style of the flower, that it almost seems as if "this is an art which does mend nature—change it, rather." Now, I can't reconcile to my feelings the use of carnations dyed a lively arsenical green, but Buttercup carnations artistically deepened into orange, to meet a sudden demand for that tint, seems decidedly ingenious and rather to be admired. Tulips are colored, also; white ones were given a delicate salmon tint, while some pale pink and white were stained with a veining of soft blue. Many of these bulbs would be the easiest of all things to color artificially.

Some nice Jacqs are now coming in from about Union Hill, but the market is not overstocked with them yet. They run about \$3 a dozen. Beauties are rather better than they were; they have varied but little in price for the past month. Speaking of roses, Mr. Merritt, at Mr. Hodgson's establishment, says that Mme. Cusin is their favorite rose, and the one they use most extensively. Its color is greatly in its favor for one thing, apart from its graceful shape, and this winter there has been a lot of very fine flowers in the market.

They had some of the first Poet's narcissus of the season at Mr. Hodgson's about the 1st of the month; very pretty, though the earlier variety, which is never quite as strong as the later one. People demand spring flowers at this season, so all the narcissus must be on hand, especially the yellow jonquils. These are used in loose masses for dinner table decorations. The favorite combinations for such occasions are yellow and white or pink and white. The simpler the arrangement, the better. One very charming combination was of cypripediums, mignonette and acacia.

Flat baskets filled with hyacinth or tulip plants are a very pretty thing for a room where the decoration consists chiefly of plants. The basket is simply lined with foil and mossed, the plants are turned out of their pots and put in close together, the balls surrounded by sphagnum.

Flat baskets filled with growing adiantums are a decided convenience to the florist; he can dot a few orchid flowers in among the ferns, and thus make a simple but handsome center-piece, which looks just twice as expensive as it really is.



Mr. Le Moutt is always kept busy with his designs, which form the largest part of his large business. Undoubtedly popular opinion is turning towards loose flowers, rather than set pieces, but there are always people who demand the latter. Mr. Le Moutt is a large importer of cypas leaves, now very largely demanded; they are to be seen gilded and silvered for decorative use, as well as in the more beautiful natural state.

Mr. Hodgson's lilies at Newport will be a feature this year, as they have been before. The *Victoria Regia* heads the list; it is some years since it was first flowered at this place, but it is still remarkable for its rarity as well as beauty. Speaking of aquatics, the Egyptian lotus ought to be more popularly grown; there is no special trouble about it, if one has any sort of pond or creek. Every florist possessing this advantage should try it, and thus create a lotus "boom" in his vicinity. EMILY LOUISE TAPLIN.

#### The American Horticultural Society.

The eighth annual meeting of this society was held at San Jose and Riverside, California—at the first-named city on Jan. 24-25-26, and at the latter city Feb. 7-8-9. Instructive papers were read and discussed, the subjects being mostly of interest to fruit-growers only. A paper on the "Palm-tree," by Dr. Albrecht of New Orleans, was ordered printed for distribution.

Resolutions were drafted and forwarded to Congress asking for protection for our existing forests, also that any reduction of the present duty on fruit would destroy many of our fruit industries.

On the 26th the delegates were tendered a banquet by the ladies of San Jose, at which 500 were present. There was a long programme of toasts and many lengthy speeches. The response of Prof. J. C. Ridpath of Indiana to the toast, "Horticulture; Practical and Theoretical," was in verse, and was well received; we give below some extracts:

To take all nature in your hardened hands,  
Plant trees and vines, train, prune, protect and pluck,  
Believe in self and in your fertile lands,  
And have more faith in living than in luck.  
To taste, to eat, to feel the throbb of pride,  
To rise rejoicing from the festival,  
To clasp new friends with old ones by your side,  
Why, this is Horticulture Practical.

To talk for weeks how much of this and that  
Is necessary that a plant may grow;  
What rainfall, dewfall, sun, wind, cloud are pat,  
And then tell others what you do not know;  
To raise within a busy cranium  
At least six crops before you plant at all;  
To write long letters, and for papers some,  
Is Horticulture Theoretical.

The interim between the two meetings was devoted to excursions throughout the state.

At the session held at Riverside Feb. 8 the following officers were elected for a term of two years: President, Parker Earl, Cobden, Ill.; Vice-president, T. V. Munson, Denison, Tex.; Secretary, W. H. Ragan, Greencastle, Ind.; Treasurer, J. C. Evans, Harlem, Mo. The convention closed on the 9th.

LINCOLN, NEB.—Among the resolutions adopted by the State Hort. society in session here Jan. 15, was the following, aimed at the oily-tongued tree agent:

Resolved, That the Nebraska State Hort. society would particularly caution the people of this state to be on their guard against the wiles of the tree peddler from abroad, who by means of highly colored plates and still more highly colored descriptions and recommendations, annually pursues his swindling operations throughout the country.

#### Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1887.

Feb. 16—Tem., morning 24°, noon 32°, evening 34°. Wind W. Cleaned *Alternantheras* and nipped young geraniums. Brought into potting room soil for potting.

17—Tem. 32, 35, 37. E. to SE. Potted rooted cuttings of *maurandias* and dwarf double *tropeolums*. Thinned foliage of and nipped young geraniums.

18—Tem. 40, 35, 31. WSW. to W. Repotted young fuchsias into 3-inch and 3½-inch pots. Nipped young geraniums in No. 4 and No. 5.

19—Tem. 32, 28, 25. W. Potted rooted cuttings of *vincas*. Propagated *Senecio scandens*. Repotted mixed plants in palm house. Cleaned *Caladium* corms.

20—Tem. 30, 38, 33. E. to NE. Sunday.

21—Tem. 32, 40, 31. E. to NE. Put in bench cuttings of *tropeolums* and a variety of *abutilons*. Potted rooted cuttings of *Achyranthes aurea*—two cuttings in a 2½-inch pot. Threw manure in one solid pile to heat.

22—Tem. 33, 43, 34. ENE. to S. Commenced propagating coleus. Pinched off tips of young *achyranthes*. Washington's birthday; no work after noon.

23—Tem. 32, 38, 32. SE. Continued putting in cuttings of coleus and nipping young *achyranthes*.

24—Tem. 27, 28, 20. NW. Continued propagating coleus. Pricked out in boxes young *lobelias*.

25—Tem. 25, 40, 35. S. Propagated *alyssums* and continued pricking in boxes *lobelias*. Death of Superintendent De Vry occurred at 5 P. M.

26—Tem. 41, 26, 22. S. to WNW. Prepared floral work and decorative plants for funeral of Supt. De Vry.

27—Tem. 11, 20, 22. NW. to W. All hands attended Supt. De Vry's funeral in a body.

28—Tem. 22, 40, 40. S. to SW. Propagated double and variegated *alyssums*. Commenced laying hotbeds (eight sashes to-day).

#### Baltimore.

Floral tea-kettles are getting to be quite the correct style of decoration for afternoon teas. A very pretty one sent out by Feast, New Year's week, had the spot formed of Marie Louise violets, the body of white camellias with a band of magnificent *Bennetts*, and the handles of *smilax*, *La France* and *Mermet* roses. Another, for a pink tea, was made entirely of pink roses, and was hung from a tripod covered with *Asparagus plumosa*. The new year has opened very auspiciously for our florists; trade has been unusually good so far, and there is every indication that it will continue brisk until the Lenten season rings down the curtain on balls, receptions and the other gayeties of society. Good roses and violets are somewhat scarce. The supply is probably equal to former years, but the demand is much greater. One specially notable evidence of lively trade is an absence of the chronic growler who always finds trade dull. Everybody appears to have all the business they can attend to, and everybody's happy.

Bedding in Chicago parks, as illustrated in the *FLORIST*, has aroused a spirit of emulation at this end of the line. I have been favored with confidential hints to the effect that Baltimore will see some tall bedding next summer. I sincerely hope so; there is certainly room for improvement. Among the notes

taken last season I find mention of a bed which pleased me very much. It was planted thickly with variegated *vinca* and bordered with *Achyranthes* *Emersonii*. In the center there was a good plant of *Areca lutescens*, six smaller palms being distributed over the bed. The effect was excellent and quite a relief from the unbroken outline so common in our styles of bedding.

The decorations at the charity ball held here on the 9th inst. were unusually elaborate and were furnished by Mr. Jas. Pentland. Some magnificent azaleas and camellias in full bloom were used. The plants were very large and were effectively arranged amongst palms, ferns, etc.; in addition to the plants, over 1,000 yards of wreathing were used. The hall presented a very handsome appearance and was to have been photographed, but owing to some mistake this was not accomplished. A. W. M.

Jan. 14.

WORCESTER, MASS.—Mr. J. Chauncey Lyford is giving a very interesting course of lectures on botany at Natural History Hall. The second lecture, delivered Jan. 30, covered the subject of "cells, protoplasm and growth." The lectures are free to all, whether members of the society or not.

LEBANON, PA.—At the session of the State Hort. Association Jan. 19 the following officers were elected: President, Calvin Cooper, Bird-in-Hand; Vice-presidents, Josiah Hoopes, Chester; Henry M. Engle, Lancaster; E. Satterwaite, Montgomery; Recording Secretary, E. B. Engle, Chambersburg; Corresponding Secretary, W. P. Brinton, Christiana, Lancaster county; Treasurer, J. H. Bartram, Chester; Librarian, Thos. J. Edge, Harrisburg. The annual address of President Cooper reviewed the horticultural results of the past year, and painted a glowing picture of beneficial work of the society and its benefits to the people of the state. Dr. James Calder and Geo. F. McFarland of Harrisburg read interesting papers on special subjects. Thomas Meehan of Philadelphia delivered a lecture on "The horticultural features of the present meeting." Lewistown was decided upon as the place of the next annual meeting.

#### SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order.

**SITUATION WANTED**—By a young man of ten years' experience; can furnish good references. Address M, care American Florist, Chicago.

**SITUATION WANTED**—By a single man; age 25 years; to take charge of a flower establishment. Well up in roses and general stock. Address A. P., care American Florist.

**SITUATION WANTED**—By a Scotchman as gardener on private place; 10 years' experience. Will be disengaged 1st of March. Good references. Address C. H. S., Newport, B. I.

**SITUATION WANTED**—By an experienced gardener; married; age 35 years. Private place preferred. Satisfactory references given. Address ROBERT LANGE, 538 Belmont Ave., Chicago.

**SITUATION WANTED**—By a practical florist fully competent on all horticultural matters. Either private or commercial, as propagator and manager. Best references. Address HORT., care American Florist, Chicago.

**SITUATION WANTED**—By a single man, as gardener; thoroughly versed in rose, cut flower and fruit culture. Private or commercial place. Good references. Address WALTER J. BAILEY, 24 Grace Ave., Harrisburg, Pa.

**SITUATION WANTED**—By a first-class florist and landscape gardener; 8 years' experience in this country and Europe; age 35; single; sober and industrious; good references. Private place preferred. Address JOHN MUELLER, box 41 Brinton, Ind.

**SITUATION WANTED**—As gardener and florist; age 25; 8 years' experience in this and the old country in growing plants and cut-flowers. Good references. Address J. F., care Am. Florist.

**SITUATION WANTED**—Gardener, thorough, practical knowledge of all branches of gardening; 15 years' experience; best of references. Address M. DWYER, care J. C. Vaughan, Chicago.

**WANTED**—Three young men to assist in seed and floral stores, plants and cut-flowers. Address C. E. HAMPTON, Kansas City, Mo.

**WANTED**—Second-hand Hatching or Carmody boiler and 4-in. cast iron pipe. Address, stating price, BAKER BROS., P. O. box 72, Kansas City, Mo.

**WANTED**—A steady man who is handy around the greenhouse and can set out bedding plants as they should be. FRANK WHITE, All & Co., Milwaukee, Wis.

**WANTED**—A thoroughly practical and competent rose grower and general propagator. Single man. Address, giving salary expected, references and experience, PAUL BRETZ & SONS, New Castle, Pa.

**WANTED**—A practical florist who understands growing roses and general stock. A good position to a steady man. German, single man preferred. Apply to HENRY EBERHARDT, 1728 S. 13th St., Omaha, Neb.

**WANTED**—Florists, read "adv." Syracuse Pottery Specialty Flower Pots; send for list of twenty sizes. "Nothing succeeds like success;" we run night and day to fill orders promptly. J. N. FRANKINS, Manager, Syracuse, N. Y.

**WANTED**—Good second-hand greenhouse boiler. Hatching make preferred—capable of heating about 700 ft. of 4-in. pipe. Also 300 ft. 4-in. pipe second-hand. Address, with cash price, FRANK CHARLES, Monroe, Orange Co., N. Y.

**WANTED**—A gardener and florist having experience in raising roses and cut flowers. Single man preferred. Address, stating wages required, including board and lodging. Employment year round if party suits. Write to P. O. Box No. 19, Portland, Oregon.

**WANTED GARDENER**—Middle-aged man, for an institution; he must have a thorough knowledge of horticulture and of superintending all operations, as well as qualified to instruct young men in horticultural pursuits. Address full particulars B. A., care Henry A. Dreer, 714 Chestnut St., Philadelphia, Pa.

**FOR SALE**—Wholesale and retail greenhouses on easy terms. Small capital required. In western city. Address W., care American Florist.

**FOR SALE**—Three greenhouses heated by hot water—plenty of water, both cistern and hydrant. Also good dwelling house and grounds. Cost \$10,000; will sell for \$5,000. Must be sold. Address AMELIA GRABOW, Appleton, Wis.

**FOR SALE**—The best retail and wholesale florist and seedsmen's business in the Northwest (population 150,000). Good location, selling with full particulars furnished on application. Address BATA, care American Florist, Chicago.

**FOR RENT** June 15—Greenhouse containing 5,000 ft. of glass heated by steam; in a western city of 50,000 population. Permanent houses, well established business. Specialty, Cut-flowers. At reasonable terms to right party. Address B. K., care American Florist.

**FOR SALE**—Established greenhouse, plant and vegetable business, and agency nursery trade—sufficient to make a nice living, in one of the most attractive and pleasant towns on the Ohio river; two railroads and river to ship on; good city trade 10 miles off, and four other good towns near. 3,000 feet of glass; houses nearly new. Good building connected with greenhouses for office and workshop; frame dwelling with five rooms. Particulars on application. Address OSCAR WRIGHT, Monksville, W. Va.

**WANTED.**  
First-Class Vegetable Gardener,  
To take charge of 20 acres. Must be single man, of good habits, and able to read and testify to his claims as to character and capability. Address, with references.

DR. E. A. KILBOURNE,  
Supt. Northern Insane Hospital, ELGIN, ILL.  
Mention American Florist.

**THE THREE B. B. B's.**  
**BRIDE, BEAUTY, BENNETT.**  
Still rank as the three best roses of recent introduction for foreign. I offer also  
**PAPA GONTIER, PURITAN, METEOR.**  
And all other new and standard varieties of Teas, Hybrid Teas, Hybrid Perpetuals, etc., etc., that are desirable for the trade, in extra fine plants at reasonable prices. I also offer for the first time  
**COLUMBIA NEW 1888.**  
A bedding rose of very superior merit. For description, prices, etc., etc., write for Trade List to  
**JOHN N. MAY,**  
SUMMIT, NEW JERSEY.

1888.

## ROSES FOR FLORISTS.

We offer the largest and most complete stock of Roses in this country. Straight 2½-in. plants, propagated from thoroughly matured field grown plants, and grown in ordinary soil without manure or other stimulating material. They resist disease, start quickly, grow rapidly and give best results.

**ALL THE LEADING VARIETIES** In large supply at very reasonable prices—*Am. Beauty, Papa Gontier, Golden Pearl, W. F. Bennett, The Bride, Her Majesty, La France, Genl. Jacqu., Perle des Jardins, Niphotos, C. Mermet, M. Robert, Pierre Guillot, Souv. d'un Ami, Sunset*, and hundreds of others.

**ALL THE LATEST NEW ROSES**—*Lucile, Mad. Etienne, Mad. Scipion Cachat, Mlle. Claudine Perran, Docteur Gril, Vicomtesse de Wauxier, Baroness de Fomville* and all choicest varieties.

**HYDRANGEA GRANDIFLORA**—*A Specialty.*—Immense stock, strong, open ground plants, all sizes, very low. Also *Exists Variegated Leaved Althea, Japan Judas, Japan Snow Ball* (Viburnum plicatum), *Japan Rose* (Rosa Rugosa), *Japanese Enslaves*, and a full line of such the best *Hardy Shrubbery and Climbing Vines*, including *Ampelopsis Veitchii* (Boston Ivy), *Akebia Quinida*, the *New Halliana*, and other *Sweet-Scented Honeysuckles*, etc., etc. *New Violets, Chrysanthemums*, and *Hardy Phlox*.

Special Wholesale Price List free on application to Florists, Market Gardeners and Dealers only. Lists priced, special selections made, correspondence solicited. Address

**THE DINGEE CONARD CO.,**  
—ROSE GROWERS,—  
WEST GROVE, Chester Co., PA.

## NEW FORCING ROSE FOR 1888.

## \* DEEP SCARLET. \* GLOIRE DE MARGOTTIN.

Pronounced by leading rose-growers superior to the "W. F. BENNETT," in color and lasting qualities. It is sent out as a Hybrid Perpetual, but its habits and forcing capacity would seem to entitle it to a prominent place among the Hybrid Teas.

A limited stock will be ready for delivery by March 20th or April 1st, and larger orders can be filled after May 1st.

PRICE, per 100, \$100.00; per doz., \$15.00; each, \$1.50. Cash with order, or C. O. D., f.o.b. cars in New York City. ORDERS BOOKED NOW. \*

ADDRESS: **J. A. DE VEER,**  
19 Broadway, NEW YORK.

## A. C. TUCKER,

Rose Grower,  
P. O. Box 190. NYACK, N. Y.

Orders are solicited NOW for Spring delivery for the following plants, in any size pots and in any quantity:

**PERLE DES JARDIN, NIPHOTOS, BON SILENCE, LA FRANCE, SOUVENIR D'UN AMI, C. MERMET, AMERICAN BEAUTY, BRIDE, PAPA GONTIER, PURITAN.**

Special discount given on all orders received up to Feb. 16th, 1888. Send for circular giving prices and terms.

**A. C. TUCKER.**  
Mention American Florist.

## 100,000 ROSES.

The leading varieties, at \$4.00 and \$5.00 per hundred.

Fine stock of VERBENAS, \$2.50 per hundred.

Large stock of BEDDING PLANTS at lowest figures. Send for Trade List, now ready.

**GEO. THOMPSON & SONS,**  
LOUISVILLE, KY.

## JAMES L. BOYSON,

CAEN, (CALVADOS) FRANCE.

1st Prize for Cut Blooms, Paris, May, 1887.

My CATALOGUE OF THE NEW  
**EUROPEAN ROSES**  
will be ready January 1, 1888, and will be sent FREE on application.  
A large stock of the last two years varieties, as well as all the older kinds for sale.  
Send for my complete Catalogue of over 1,200 varieties, with raisers' names and date of sending out

## ROSES.

1888.

## ROSES FOR FLORISTS.

We offer the largest and most complete stock of Roses in this country. Straight 2½-in. plants, propagated from thoroughly matured field grown plants, and grown in ordinary soil without manure or other stimulating material. They resist disease, start quickly, grow rapidly and give best results.

**ALL THE LEADING VARIETIES** In large supply at very reasonable prices—*Am. Beauty, Papa Gontier, Golden Pearl, W. F. Bennett, The Bride, Her Majesty, La France, Genl. Jacqu., Perle des Jardins, Niphotos, C. Mermet, M. Robert, Pierre Guillot, Souv. d'un Ami, Sunset*, and hundreds of others.

**ALL THE LATEST NEW ROSES**—*Lucile, Mad. Etienne, Mad. Scipion Cachat, Mlle. Claudine Perran, Docteur Gril, Vicomtesse de Wauxier, Baroness de Fomville* and all choicest varieties.

**HYDRANGEA GRANDIFLORA**—*A Specialty.*—Immense stock, strong, open ground plants, all sizes, very low. Also *Exists Variegated Leaved Althea, Japan Judas, Japan Snow Ball* (Viburnum plicatum), *Japan Rose* (Rosa Rugosa), *Japanese Enslaves*, and a full line of such the best *Hardy Shrubbery and Climbing Vines*, including *Ampelopsis Veitchii* (Boston Ivy), *Akebia Quinida*, the *New Halliana*, and other *Sweet-Scented Honeysuckles*, etc., etc. *New Violets, Chrysanthemums*, and *Hardy Phlox*.

Special Wholesale Price List free on application to Florists, Market Gardeners and Dealers only. Lists priced, special selections made, correspondence solicited. Address

**THE DINGEE CONARD CO.,**  
—ROSE GROWERS,—  
WEST GROVE, Chester Co., PA.

## NEW FORCING ROSE FOR 1888.

## \* DEEP SCARLET. \* GLOIRE DE MARGOTTIN.

Pronounced by leading rose-growers superior to the "W. F. BENNETT," in color and lasting qualities. It is sent out as a Hybrid Perpetual, but its habits and forcing capacity would seem to entitle it to a prominent place among the Hybrid Teas.

A limited stock will be ready for delivery by March 20th or April 1st, and larger orders can be filled after May 1st.

PRICE, per 100, \$100.00; per doz., \$15.00; each, \$1.50. Cash with order, or C. O. D., f.o.b. cars in New York City. ORDERS BOOKED NOW. \*

ADDRESS: **J. A. DE VEER,**  
19 Broadway, NEW YORK.

**NOVELTIES IN ROSES.**  
Also the leading forcing varieties, Teas, H. Teas and H. Perpetuals. 1,000 large roses in 6 and 7-inch pots; C. Mermet, La France, Sunset, Perles and Bon Silence, at \$5.00 per 100. Chrysanthemums, best varieties, 5 and 6-inch pots, \$15.00 to \$20.00 per 100. Bouvardias, 2½-inch pots, \$5.00 per 100. Gardenia Radicans, @ \$5.00 per 100. Grand Duke Jasmine, @ \$5.00 to \$8.00 per 100. 3,000 American Holly, flex opaco, @ \$10.00 to \$12.00 per 100. Choicest buds and cut flowers at lowest market prices.  
**JACOB SCHULZ, LOUISVILLE, KY.**

**IMPORTED M. P. ROSES.**  
Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagation quickly. Fine plants for sale by the 100 or 1,000, at low rates.  
Address

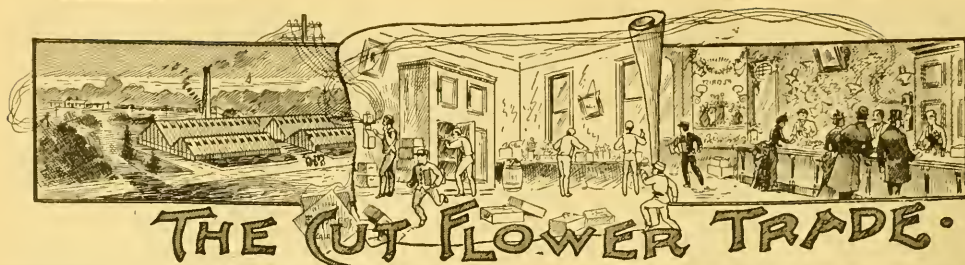
**WILLIAM H. SPOONER,**  
JAMAICA PLAIN, (Boston), MASS.

**Budded Roses for Winter Forcing or Spring Market Sales—H. P. and Teas.**

**SPECIAL OFFER:**  
The following varieties, equal quantities of each, we sell for \$10.00 per 100.  
H. P.—*Anna de Diesbach, La France, Genl. Jacquemot, Paul Neyron, Queen of Queens, Comtesse d'Oxford, Jules Margottin, Anna Alexiess, Marie Gabriel Luize, Mme. Knorr, Marie Baumann, Gloire de Lyonaise, Her Majesty, M. de Monplaisir, Alfred Colomb.*  
The following Tea Roses at \$15.00 per 100: *Perle des Jardins, Mme. Lamhard, Marie Van Houtte, Mme. Filicot, Mme. Charles Mlle. Françoise Krueger, Duchess Mathilde, Cornelia Cook.*  
Catalogue on application. Dormant buds of the new H. P.'s of 1887—*Earl of Dufferin*, dark, nearly new H. P.; *Lady Helene Stewart*, red. The new Tea Rose *Mme. Elbel*, Brownlow, similar to C. Mermet, very free flowering. All at \$1.00 each.  
Cyclamen persicum, the plants in buds which will flower in November, \$1.00 each. American Beauty, Bennett, Papa Gontier, Niphotos in 6-inch pots, 50c. each. **SCHULTHEIS BROTHERS,**  
P. O. Box 75. COLLEGE POINT, LONG ISLAND, N. Y.

**E. BENARD,**  
ORLEANS, FRANCE.  
**ROSES ON THEIR OWN ROOTS**  
**A SPECIALTY.**  
**NURSERY STOCK OF ALL DESCRIPTIONS.**  
For particulars apply to  
**E. BENARD, JR., NILES, CAL.**





### Latest Floral Fashions.

For cut flower decorations the demand is gradually changing from pink and white blossoms to those of yellow and its several shades, salmon tints being very popular, and also terra cotta. Terra cotta tulips combined with mignonette are very fashionable for breakfast and luncheon arrangements, and these tulips, with a fanciful setting of Farleyense ferns, are much used for quiet dinners. Table embellishments are made in irregular forms. Center pieces for tables are made low, with only a middle object selected for beauty. Borders are high, however, which gives a unique and beautiful effect.

Ribbon is used in profusion. It is satin or moire, the latter being preferred. Favors are not so much used except for luncheons. Thorley has introduced porcelain watering pots of a pale pink and gilded pottery for luncheon favors, which are much in vogue; these are filled with primroses, and are suitable for young ladies' luncheons. The watering pots are useful afterwards for sprinkling a nosegay, and are a handy accessory to the dressing table. Just as many flowers are ordered as when favors were fashionable for dinners, for more are put on the table. Borders are composed of clusters which are distributed among guests after the feast.

A salmon-colored dinner composed entirely of carnations of that tint, tied with satin sashes, was a very rich decoration made lately. The table was a bed of clusters bound together with ribbons. Another dinner was a bed of daffodils and Roman hyacinths tied together with yellow ribbons.

The English fashion of decorating with plants will be the favorite style for some time to come. So many charming spring plants appear in pots, that there is ample material for embellishments of this kind. The cotillon dinner to be given in Delmonico's grand ball-room will be decorated in this fashion. The main part of the board is bedded with lycopodium (the yellow-tipped variety is very elegant for use with golden flowered plants), and in this small plants in pots are placed in clusters, which are encircled with ribbon to match the color of the flowers in each cluster. Parterres are to be made with lycopodium throughout the room, and in these groups of blooming plants in large pots will be placed, wide sashes of ribbon encircling each group, the ribbon being bound over the pots in a graceful and ornamental style.

For a large private ball at Mrs. Marshall O. Roberts' house all the plants, instead of being in pots, will be growing in standard baskets which have tripod stands. These stands will be placed in groups and held with very wide sashes.

A stand, or group of stands, with blue Roman hyacinths is bound together with wide pale blue watered ribbon. Another group contains white blossoms growing, such as Bride roses and lilies; white satin ribbon is used to connect these stands. Each group of stands is placed on a parterre of lycopodium moss. This style of embellishment is about the richest of the season's novelties for either a public saloon or a private drawing room.

Brides are wearing gowns elaborately trimmed. A train entirely composed of lily of the valley, a side panel of stephanotis, and Bride roses and orange blossoms in sprays, to fasten the veil, are the flowers to be worn by a bride next week. Garlands of lily of the valley are placed across the front breadth of a satin gown for a bride; there are three of these, the lower ones being the longest. They are held at each end with ribbon, lace and orange flowers. Bridesmaids are carrying orchids. At a very fashionable wedding where there are twelve bridesmaids, six of these carry blue, and six pink orchids, to match the color of their gowns.

New York. FANNIE A. BENSON.

### Philadelphia.

The cut flower trade is all that could be expected. Every florist was very busy last week, and business has not fallen off any this week. Mermets have found a ready sale at \$10 to \$15 a hundred, the bulk of the sales being made at \$12. Fair American Beauties bring \$30. There is not the demand for Perles and Sunsets that existed in previous years. Good Bon Silenes sell readily at \$1 a hundred.

Mr. Evans is said to have the best Brides in the market, while John Burton takes the lead in Mermets, and it is a race between Edwin Lonsdale and John Burton as to American Beauties.

Craig & Bro. have a fine lot of Lilium Harrisii that they expect to have right for Easter. The outlook for a good spring trade is very encouraging. W. W. C.

**ARD-RICH OR IRISH KING NARCISSUS.**—Sample blooms of this narcissus have been sent us by Joseph Breck & Sons, Boston. The color is a very attractive shade of golden yellow and the blooms are of good form and size. Mr. Wood of Newton, Mass.—the grower of the flowers sent—says: "Bulbs of Irish King and major were planted Nov. 1, last and both varieties came up together Jan. 1. The Irish King is now in bloom, and it will be three or four weeks before the major will bloom. The Irish King is thus proved to be very early."

An illustration of this daffodil appeared on page 371 of Vol. II of the AM. FLORIST. It is there described as a very early and useful daffodil for forcing.

### Robert Craig Greatly Improved in Health.

We are pleased to say that Mr. Robert Craig has greatly improved. Advice from Philadelphia, under date of Feb. 10, states that he is convalescent and no longer confined to the house.

### Pink Gladioli for Cutting.

In reply to the inquiry of D. W. M., page 280, I would recommend Angele as a delicate blush gladiolus of good form and fine spike. Catalogues describe it as "white, slightly tinted with delicate rose." Eugene Scribe is darker, and is one of the best varieties for cutting. Long spike, often branched, flowers very large, tender rose, flamed with carmine.

SAMUEL C. MOON.

IN ANSWER TO D. W. M., who asks which is the best variety of pink gladiolus for cut flowers in summer, I would say Felicien David. W. T. BELL.

**ROCHESTER, N. Y.**—The thirty-third annual convention of the Western New York Hort. society opened Jan. 19 with a very large attendance, delegates being present from all the western counties in the state. In the absence of President Patrick Barry, his annual address was read by Mr. W. C. Barry. Forty-eight new members were received by the society during the meeting. Many valuable and interesting papers were read, which were thoroughly discussed by those present. Officers for the ensuing year were elected as follows: President, Patrick Barry; Vice-presidents, S. D. Willard, Geneva; W. C. Barry, Rochester; W. Brown Smith, Syracuse; J. S. Woodward, Lockport; Secretary-treasurer, P. C. Reynolds, Rochester. Executive Committee—C. M. Hooker, Rochester; Lewis Chase, Rochester; B. W. Clark, Lockport; C. W. Stewart, Newark; N. Bogue, Batavia.

**WASHINGTON.**—A funeral pall recently made by Freeman was of black cashmere and was six feet long by two in width. Two feet at each end were solid masses of tulips, roses and hyacinths sewed on to the cloth. In the center the word "Unity" was traced in white immortelles, the whole fringed with smilax. White ribbons were used to hold the pall on the casket, they being caught at the handles. At the funeral of a member of a base-ball nine, a tribute from the club took the form of a base formed of smilax bordered with white carnations upon which appeared in flowers a ball and crossed bats. The bats were of yellow carnations, the ball of white carnations with seams of blue violets. The name of the club was lettered on the base in white violets.

**THE AMERICAN FLORIST**

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 cents a Line, Agate;  
Inch, \$1.40; Column \$14.00.  
Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per  
cent; 12 months, 20 per cent.

No reduction made for large space.

The Advertising Department of the AMERICAN  
FLORIST is for Florists, Seedsmen, and dealers in  
wares pertaining to those lines ONLY. Please to  
remember it.☞ Advertisements for March 1st issue must  
REACH US by noon, Feb. 21. Address:

THE AMERICAN FLORIST CO., Chicago.

**Catalogues Received.**

Northrup, Braslan & Goodwin Co., Min-  
neapolis, Minn., seeds; Wm. H. Maule,  
Philadelphia, seeds; A. C. Nellis Co., New  
York, seeds; J. C. Vaughan, Chicago, seeds;  
James J. H. Gregory, Marblehead, Mass.,  
seeds; Hill & Co., Richmond, Ind.,  
plants; W. Piercey, Forest Hill, London  
S. E., England, chrysanthemums; A. D.  
Cowan, New York, seeds; W. Atlee  
Burpee & Co., Philadelphia, seeds; F.  
M. Bullard, West Swaney, N. H., seeds;  
H. A. Dreer, Philadelphia, wholesale  
list plants and seeds; E. Hippard,  
Youngstown, O., plants; Robt. J. Halli-  
day, Baltimore, seeds and plants; Gar-  
dner Bros., Freeport, Ill., seeds; C. E.  
Angell, Oshkosh, Wis., seeds; Webster  
Bros., Hamilton, Ont., plants; Geo.  
Thompson & Sons, Louisville, Ky.,  
plants; Michel Plant and Seed Co., St.  
Louis, plants and seeds; W. L. Smith,  
Aurora, Ill., plants; V. Lemoine, Nancy,  
France, plant novelties.

Z. DE FOREST ELY & Co. are pushing  
a new tomato named "Ely's King of the  
Earlies" It is said to be twenty days  
earlier than any other variety. See their  
advertisement containing illustration, on  
another page.

PROF. CHARLES S. SARGENT is recover-  
ing from his recent illness, but is not  
yet able to give personal attention to  
*Garden and Forest*, the new journal of  
horticulture, landscape art and forestry,  
which he is to conduct. The first issue  
of the journal will therefore probably not  
appear until the latter part of the pres-  
ent month.

**HAMMOND & HUNTER,**  
Wholesale Dealers in

Cut Flowers and Florists' Supplies

51 West 30th Street, NEW YORK.

**WELCH BROS.,**  
WHOLESALE FLORISTS,

165 Tremont Street, BOSTON, MASS.  
We make a specialty of shipping choice Roses and  
other Flowers, carefully packed, to all points in  
Western and Middle States.  
Return Telegram is sent immediately when it  
is impossible to fill your order.

**KENNICOTT BROS.,**  
WHOLESALE FLORISTS.

ALL CUT FLOWERS IN SEASON.

Write for price list. Consignments solicited.

27 Washington Street, CHICAGO.

**CUT FLOWERS FOR THE TRADE.**

CARNATIONS, VIOLETS, ROSES, SMILAX, BULBS, ETC.  
Having doubled the capacity of my houses, with  
steam heat in all of them, I offer a large variety.

**JOSEPH RENARD,**

Successor to THOS. F. SEAL,

UNIONVILLE, Chester Co., PA.

Telegrams to West Chester, Pa. will reach me  
promptly, but letters should be sent to Unionville.**Wholesale Markets.****Cut Flowers.**

BOSTON, Feb. 9.	
Roses, Teas.....	\$4.00 @ \$5.00
" Niphetos.....	5.00 @ 5.00
" Perles.....	10.00 @ 12.00
" Mermets, Brides.....	12.00 @ 14.00
Lily of the valley.....	4.00
Tulips, Daffodils.....	4.00
Freesia.....	3.00
Carnations, long stems.....	1.50 @ 3.00
" short.....	1.00 @ 1.50
" fancy, long.....	3.00
Smilax.....	3.00
Violets.....	1.50
Callas.....	12.00
Heliotrope, Mignonette.....	1.00

NEW YORK, Feb. 9.	
Roses, Bon Silenes.....	4.00
" Papa Gontiers.....	6.00
" Perles, Souvs, Niphetos.....	4.00 @ 5.00
" Mermets, Brides.....	8.00 @ 10.00
" Cousins, Bennetts.....	8.00
" La France.....	15.00 @ 20.00
" Am. Beauties.....	25.00 @ 30.00
" Puritan.....	15.00 @ 25.00
" Jacques.....	30.00
Mignonette.....	2.00 @ 3.00
Smilax.....	25.00
Carnations, long stems.....	1.50
" short.....	1.50
Roman hyacinths.....	3.00
Lily of the valley.....	3.00 @ 4.00
Tulips.....	4.00 @ 6.00
Violets.....	1.00
Lilacs, per bunch.....	1.00

CHICAGO, Feb. 10.	
Roses, Bon Silenes.....	5.00 @ 6.00
" Perles, Niphetos.....	3.00
" Mermets.....	10.00 @ 15.00
" Brides.....	8.00 @ 10.00
" Bennetts, Dukes, La France.....	12.00 @ 15.00
" Am. Beauties.....	35.00
Carnations short.....	1.00
" long.....	2.00
" Grace Wilder.....	3.00
Smilax.....	18.00
Lily of the valley.....	5.00
Romans, Paper White narcissus.....	4.00
Tulips.....	4.00 @ 5.00
Bonvardia, heliotrope.....	2.00
Violets.....	6.00
Callas.....	12.50

PHILADELPHIA, Feb. 9.	
Roses, Teas.....	\$3.00
" Niphetos.....	5.00
" Mermets, La France.....	15.00
" Perles.....	6.00
" Niels, Cooks.....	20.00
" Bennetts.....	10.00
" Am. Beauties.....	25.00
Carnations.....	1.00 @ 1.50
Roman hyacinths.....	5.00
Bonvardia.....	1.00
Smilax.....	1.00
Lily of the valley.....	3.00
Callas.....	10.00
Harrisian lilies.....	15.00
Narcissus.....	6.00
Double violets.....	1.00
Business good.	

**SPECIALTIES FOR FEBRUARY.**

FINE ROSES,  
LILY OF THE VALLEY,  
VIOLETS, TULIPS,  
CYCLAMENS, ORCHIDS,  
HARRISH LILIES.

WM. J. STEWART,  
67 Bromfield St., BOSTON, MASS.

Mention American Florist.

**CUT FLOWERS AT WHOLESALE**  
**N. F. MCCARTHY & CO.**  
WHOLESALE FLORISTS,

63 Bromfield St., under Hort. Hall, Boston, Mass.  
We have made large contracts with the best Rose  
growers about Boston to handle their entire stock  
this season. Our stock will consist of Papa Gontier,  
Bennett, Pierre Guillot, American Beauty, Mer-  
met, La France, Malmaison, Cook, Bride, Niphetos,  
Perle, Niel, Anna Webb and Grace Wilder pinks,  
long stems, other flowers in variety. We shall have  
a particularly large lot of Mermets and Perles, so  
that in sending to us you will get them either  
where you will feel reasonably sure of getting them.  
Unknown parties must give satisfactory reference  
or let us send C. O. D. Write for information.

CHAS. E. PENNOCK,  
WHOLESALE FLORIST,  
38 So. 16th Street,  
PHILADELPHIA, PA.

Mention American Florist.

Thos. Young, Jr., &amp; Co.,

**Wholesale Florists,**

INCORPORATED 1885,

20 W. 24th St., NEW YORK.

**W. S. ALLEN,****WHOLESALE DEALER IN CUT FLOWERS,**

36 EAST 23rd STREET, NEW YORK.

ESTABLISHED 1877.

Price List sent upon application.

**LaRoche & Stahl,**

Florists &amp; Commission Merchants

—OF—

**CUT FLOWERS.**

1237 Chestnut Street, — PHILADELPHIA.

Consignments Solicited. Special attention paid to  
shipping. Mention AMERICAN FLORIST.**C. STRAUSS & Co.**

Telephone 977-3.

WASHINGTON, D. C.

Growers of and Wholesale Dealers in

**ROSES and OTHER CUT FLOWERS**

1000 Puritan Planted for coming Winter.

**GEO. MULLEN,**17 CLAPMAN PLACE, (near Parker House),  
BOSTON, MASS.**WHOLESALE and COMMISSION DEALER IN****Fresh Cut Flowers & Florists' Supplies.**

Flowers carefully packed and shipped to all points  
in Western and Middle States.  
Orders by Telegram, Mail, Telephone or Express  
promptly attended to.

**THEO. ROEHR'S,**

WHOLESALE

**FLORIST,**

153 W. 31st St., NEW YORK.

—SPECIALTIES:—

SMILAX, NARCISSUS, LILY OF THE VALLEY.

TULIPS, ROMAN HYACINTHS, LILACS.

**CURRIE BROS.,**

Growers of and Wholesale Dealers in

**CUT FLOWERS**

MILWAUKEE, WIS.

SEND FOR PRICE LIST.

**CUT FLOWERS**

The choicest Cut Flowers at lowest market rates  
shipped C. O. D. Telephone connection. Use A. F.  
Code when ordering by telegraph. For prices, etc.,  
Address,

J. L. DILLON, BLOOMSBURG, PA.

**M. MALSH,**

206 S. Halsted Street, CHICAGO.

WHOLESALE DEALER IN

**CUT FLOWERS,**

AND GROWERS' AGENT.

Regular shipping orders especially solicited.



## Seed Trade.

SEED TRADE ASSOCIATION.—William Meggat, president, Wethersfield, Conn.; Albert M. McCullough, secretary, Cincinnati, O.

SEED TRADE ASSOCIATION.—The sixth annual convention will be held in Chicago beginning Tuesday, June 12; applications for membership should be forwarded to Albert McCullough, secretary, Cincinnati, Ohio.

## New Asparagus.

Some little interest has been excited by the announcement of the discovery of a new and remarkable variety of asparagus on the steppes of Akhal-Tekiz. It has not been botanically identified, but it is represented as growing perfectly wild, the stalks being nearly as thick as a man's arm and attaining a height of five or six feet, so that one of them is said to suffice ten Russian soldiers for a meal. If the preference of experts for wild asparagus finds justification in this variety, and its flavor is described as equal to that of the best European kinds, asparagus lovers may have a good time before them.—*Pharmaceutical Journal*.

P. W. R. in *Florida Dispatch* says: "It is suggested that Mr. Burpee be requested to take a little run over to the steppes of Akhal-Tekiz and ascertain the exact capacity of ten Russian soldiers, and whether this new asparagus is really distinct, or only a variety of *Asparagus tenuissimus* flourishing under a favorable combination of sub-irrigation and plentiful supplies of smilax and adiantums for the matrimonial displays. If really new it should by all means be brought out as 'Burpee's extra early mammoth strain of the colossal improved gracefully waving Adiantum-like Akhal-Tekiz sparrow-grass.'"

## Indianapolis.

The Society of Indiana Florists will hold their second annual meeting at Indianapolis, Feb. 22-23; an interesting and well selected programme has been prepared, and all florists from this State and other visitors are welcome. The exhibition committee will report at that time and arrangements will be made for the next one.

The local society organized permanently at their meeting in January by electing Wm. Langstaff, president; Chas. Rieman, vice-president; John Hartge, secretary; Anthony Wiegand, treasurer; W. H. Lawrence, corresponding secretary. At their last meeting the executive committee member from this section related his experience in the East and the royal welcome the New York florists gave the committee; he also read a paper on the best mode of heating with natural gas. The gas question is booming here. The local club also passed resolutions in memory of the recently deceased Francis Morat, of Louisville; Anthony Wiegand attended the funeral.

Business is quiet compared with the same time last year.

All florists attending our meeting will please ask for certificates coming and pay full fare; returning they will pay one-third. W. B.

TORONTO, ONT.—A meeting of the creditors of Henry Sleight, of the City Nurseries, was held Jan. 23. The statement showed the liabilities to be \$10,000 and the nominal assets \$16,000.



## ELY'S KING OF THE EARLIES TOMATO.

In placing this valuable new tomato before the trade, we do so with the full assurance that it will prove worthy of all we say of it. It is the result of ten years' careful selection by one of our most reliable growers, constantly saving from year to year the earliest and best-formed fruit. It grows a stout, medium-sized and branching vine, upright in growth until weighted down with fruit; it is a rapid grower, and sets the crown fruit when quite young, the buds appearing when only three inches high and in the fourth leaf; blossoms adhere and produce fruit in clusters of ten to twelve, which not infrequently ripen within ten days of each other, while the entire crop has frequently been picked within a period of thirty days from first ripening. It is enormously productive, and of good size, bright red in color and quite solid. Its great advantage is its extreme earliness, being ten days earlier than any other variety we have ever seen.

In a test made side by side with the Beauty, it was twenty-three days earlier, ripening June 20th, while the Beauty, planted at same time, was not ready to pick until July 2d. From 1,550 plants of King of the Earlies, 175 baskets were gathered and sold for a net return of \$205.36, when the first basket of Beauties were ready for market and brought only 75 cts. Sold only in original sealed packets. Per large pkt., 25 cts.; five packets for \$1.00. TRADE SUPPLIED AT \$10.00 PER 100 PKTS.

— WRITE FOR OUR WHOLESALE PRICE LIST. —

## Z. DE FOREST ELY &amp; CO.,

SEED MERCHANTS, GROWERS AND IMPORTERS.

Headquarters for Garden Seeds, Onion Sets, Seed Potatoes & Flowering Bulbs.

1301 & 1303 MARKET STREET,

TELEPHONE 1298.

AND 246 NORTH BROAD STREET,

Registered Cable Address:  
DE FOREST, PHILA.

PHILADELPHIA, PA.

HAMMOND'S

Slug Shot kills insects.

Grape Dust kills mildew.

Sold by  
the  
Seedsman.

**JOHNSON & STOKES' GARDEN and FARM MANUAL**

For 1888, will be sent FREE to all who write for it. It is a Handsome Catalogue with Colored Plates, and the FINEST COLLECTION OF SEEDS ever offered. Our MARKET GARDENERS adapted to their purposes, and all TOOLS necessary to manage a complete garden. If you grow VEGETABLES FOR MARKET, tell us so when you send for our Catalogue.

**JOHNSON & STOKES, 219 Market Street, Philadelphia, Pa.**







## News Notes.

BALTIMORE.—J. F. Dungan & Co. have succeeded Mrs. H. Eichelberger at 813 Madison avenue.

YOUNGSTOWN, O.—Geo. Vogel has located here, having removed his business from Hubbard, O., to this city.

MADISON, N. J.—Fire last week partially destroyed the greenhouses leased by Leauder Brown; partially insured.

NORRISTOWN, N. J.—The greenhouses belonging to H. Frapwell were considerably damaged by fire the last of January; loss partly covered by insurance.

WINFIELD, L. I.—Fire originating from an overheated flue destroyed nine greenhouses belonging to I. Burroughs Hyde, Dec. 30. Loss about \$4,000, partly covered by insurance.

LYNN, MASS.—The private greenhouse of C. H. Andrews, of the Boston *Herald* was destroyed by fire Jan. 6. The fire originated near the boiler. Loss on the building was about \$500, and on plants about \$2,500. A Pandanus utilis valued at \$100 was among the plants destroyed.

DUBOQUE, IA.—The Dubuque County Hort. society held its fifth annual meeting in this city, Jan. 28-29. The attendance was small, owing to very unfavorable weather, but great interest was manifested by those who did attend, and a number of very valuable papers were read.

LONDON, ONT.—At a meeting of the city Hort. society, Jan. 18, the following officers were elected for the ensuing term: A. W. Porte, president; W. Y. Brunton, first vice-president; A. M. Smart, second vice-president; Messrs. T. H. Marsh, W. M. Gartsshore, W. R. Hobbs, Col. Lewis, Geo. M. Reid, T. R. Parker, J. D. Sharman, John Green, Col. Leys, directors. The treasurer's statement showed receipts \$2,011.99; disbursements, \$1,728.74—balance on hand, \$283.25.

CLEVELAND.—Mrs. J. M. Gasser, wife of the well-known florist, and a lady clerk had a very unpleasant experience the night of Jan. 29, which nearly resulted in death to both. They slept alone that night in the living-rooms over the store, which are heated by a self-regulating furnace in the basement, and they were nearly asphyxiated by gas which escaped from it during the night. When found at 9:30 A. M. the next day both were on the brink of death, a feeble fluttering of the heart being the only sign of life. Physicians succeeded in restoring them to consciousness after two hours' work, and they are now recovering. The doctors state another half-hour's delay would have resulted in certain death.

PROVIDENCE, R. I.—The annual meeting of the Rhode Island Hort. society, held Jan. 25, was a stormy one. It was the time for the annual election of officers, and one member objected to the report of a nominating committee which had been appointed by the president, claiming that the latter had exceeded his authority, and was endeavoring to gratify a personal ambition. This the president denied, and a lively time ensued. The election finally resulted as follows: President, Amasa M. Eaton; Vice-president, Levi W. Russell; Secretary and Treasurer, Christopher R. Brown; Librarian and Cor. Secretary, Thos. K. Parker; Botanist, W. W. Bailey; Executive Com-

mittee, Amasa M. Eaton, Levi W. Russell, Christopher Brown, John G. Massie, Silas H. Manchester, Henry T. Root, O. Fitzgerald; Finance Committee, John G. Massie, F. M. Ballou, J. C. Johnson. A resolution expressing praise of the efficient manner in which the retiring secretary, Mr. Cyrus C. Armstrong, had discharged his duties, and regret at his retirement, was unanimously adopted.

MINNEAPOLIS.—At the meeting of the Minnesota State Hort. society, Jan. 20, many interesting and valuable papers were read, among which were the following: "Tubers indigenous to the Northwest," by Col. John H. Stevens; "Arctic flowers," by Mrs. C. O. Van Cleave; "Floral decorations," by Mrs. M. S. Gould; "The amateur's flower garden," by Frank H. Carleton; "Gardening, and moral influence of flowers," by Robert Hall. The election of officers resulted as follows, and with the exception of Ditus Day, who takes the place of J. T. Grimes, as treasurer, were the same as last year: President, Wm. Elliott, Minneapolis; Vice-presidents, A. W. Sias, Rochester; E. H. S. Daret, Owatonna; M. Cutler, Sumpter; N. J. Stubbs, Long Lake; G. W. Fuller, Litchfield; Secretary, S. D. Hillman, Minneapolis; Treasurer, Ditus Day, Farmington; Entomologist, O. W. Oestlund, Minneapolis; Librarian, E. A. Cuzner, Minneapolis; Executive Committee, J. S. Harris, La Crescent; J. M. Underwood, Lake City; F. G. Gould, Excelsior; Isaac Gilpatrick, Minneapolis; F. Brand, Faribault.

5,000

## CHRISTMAS EVE CHRYSANTHEMUMS

Strong plants, in 2½-inch pots; the most valuable white variety for late cutting. Every florist should know this variety.

CHESTER FLORAL CO. (Limited), Chester, Pa.

E. WEISS. A. E. JONES. M. RICE.

—REMOVAL OF THE—  
Philadelphia Immortelle Design Co.,

Importers, Manufacturers and Dealers in  
FLORISTS' SUPPLIES,  
Designs for Grave Decorations and Funeral Purposes,  
Immortelles, Grass Bouquets, and Pampas Plumes.  
Removed to 904 Filbert St., PHILADELPHIA.

## SEEDS, SEEDS, SEEDS

—We offer unusual inducements—  
to FLORISTS in

ROMAN HYACINTHS,  
LILY OF THE VALLEY PIPS,  
PAPER WHITE NARCISSUS,  
LILIUM CANDIDUM, &c.

Crop of 1888.

Prices according to quantity required, on application.

J.M. THORBURN &amp; Co., 15 JOHN ST., NEW YORK.



IT is a conceded fact that there is no better place in the U. S. for Nurserymen to sort up, Dealers to Pack, or Planters to order, than at the Painesville Nurseries, the aim of THE STORRS HARRISON CO. being to carry a full line of Fruit and Ornamental Trees, Bulbs, Shrubs and Roses. Have a remarkably fine stock of Standard and Dwarf Pears, Kilmarnock Willows and other Weeping Trees; also Grape Vines, including all the Best New Sorts—Moore's Diamond, Empire State, Niagara, Jessica, Frances B. Hayes, etc. Can supply car loads of elegant, large Nursery-grown Elms, Catalpas, Maples, Poplars, Tulips, etc. The handsomest lot of Pyramidal Arborvitae and Irish Juniper ever offered, and acres on acres of other Evergreens. Prices reduced to suit the times. Come and see. Correspondence solicited. Catalogue Free. 33d Year. 700 Acres. 24 Greenhouses. Address THE STORRS & HARRISON CO., PAINESVILLE, LAKE CO. OHIO.



E wish to call the attention of florists to our stock of young

## \* ROSES \*

—AND—

## \* CARNATIONS. \*

We also offer a large stock of acclimated

## RHODODENDRONS

grown one year in this country and well set with bloom-buds. These plants are in perfect health and condition and will prove satisfactory.

We also have a large stock of Musa Ensete and other desirable plants. Send us a list of your needs and will give you low prices.

B. A. ELLIOTT CO.,  
PITTSBURG, PA.

## MOST EXTENSIVE STOCK

## JAPANESE &amp; CHINESE

Fruit Trees. Ornamental Trees. LILY BULBS AND SEEDS. Stock carefully raised in our Nurseries in Japan. H. H. BERGER & CO., 315 & 317 Washington Street, SAN FRANCISCO, CALIFORNIA. Catalogue free. Established 1878.

## BEGONIAS! BEGONIAS!

## 2,000 PLANTS OF SUTTON'S SNOWFLAKE.

One of the best white flowering Begonias, either for cutting or pot work. Transplanted plants at the low rate of \$2.10 per 100, \$10.00 per 1,000.

## JOHN GOODE &amp; CO.,

63rd Street and Kimbark Avenue,  
HYDE PARK, ILL.

Rooted Cuttings of Verschaffeltii, 2 per 100 per 1000  
Victoria, Frebrand, J. Goode Coleus 2.50 \$7.50  
Alternanthera Aurea Nana .50 5.00  
Heliotrope, strong, mixed varieties, 2.00  
24-in. pots, 2.00  
Saffron Roses, 24-in. pots, 3.00  
Those in need of stock not quoted, write and get lowest prices.  
JOHN J. CONNELLY, Bryn Mawr, Pa.

**AUGUST RÖLKER & SONS,**  
44 Dey St., NEW YORK,  
Supply the Trade with  
**SEEDS, BULBS,**  
And all kinds of  
**FLORISTS' SUPPLIES.**  
1888 Trade List for Seeds now ready.

**BULBS, IMMORTELLES.**  
**J. A. DE VEER,**  
(Formerly of DeVeer & Boomkamp.)  
19 Broadway, New York.

SOLE AGENT FOR  
GENERAL BULB CO., Vogelenzang, (Holland.)  
Ls. BREMOND FILS, Ollioules, (France.)  
Offers to the trade, net without engagement:  
Lily of the Valley (true Berlin pipe), per 100, \$9.00  
in original cases of 2,500, \$22.00. Per 100, Per 1000  
Lilium Anatum, large bulbs, ..... \$9.00 \$89.00  
Excelsior Pearl Tuberoses, extra, ..... 1.25 15.00  
" " 2nd size, ..... 1.25 10.00  
Gladioli, large bulbs, fine mixed, ..... 1.50 12.00  
" " Brenchleyensis, ..... .50 7.50  
" " scarlet & crimson, ..... 1.00 9.00  
" " pink & variegated, ..... 1.75 15.00  
" " white and light, ..... 2.25 20.00  
" " yellow and yellow  
grounds, ..... 2.50 22.50  
Hyacinthus Candicans, large ..... 2.50 20.00  
per 100 per doz.  
Dahlias in fine sorts, undivided roots, ..... 15.00 2.25  
" in separate colors, " ..... 12.00 1.75  
" in fine mixture, " ..... 9.00 1.25  
Cannas ..... 5.00 .75  
Caladium Esculentum, large bulbs, ..... 12.00 1.75  
" good sized bulbs, ..... 7.00 1.00  
For prompt or Spring delivery.

## \*TUBEROSE BULBS\*

We are the largest growers in the country, and  
offer the best quality

PEARL TUBEROSES ..... per 1000, \$20.00  
DOUBLE ..... " 20.00

Trade List mailed free.  
**HENRY A. DREER, Philadelphia.**

## FLORIDA CROWN BULBS.

Tuberoses, No. 1 and Tall double ..... per 1000, \$10.00  
Caladium Esculentum, ..... per 100, 4 50  
Amaryllis Equestris, extra bulbs, ..... 15.00

**A. H. CRANE,**  
**NASHUA, FLA.**

## Pearl Tuberoses Bulbs.

Per 100 Per 1000  
First size ..... \$2.00 \$18.00  
Second size ..... 1.50 12.50  
Good sound bulbs.

**A. R. ALDRICH,**  
**SPRINGFIELD, OHIO.**

Hillebrand & Bredemeier,  
FLOWER-BULBS AND SEED GROWERS,  
PALLANZA, (Lago Maggiore), ITALY.

Make a specialty of growing for the trade,  
**FLOWER BULBS.** Preciasas, Narcissus, Lilies,  
Alliums, Ornithogalum,  
Anemones, Ixias, Sparaxis, Tritomas, Cyc-  
lamus, Gloxinias, Begonias, etc., etc.

**FLOWER SEEDS.** All fine flower seeds are  
grown with speciality with  
greatest care and in quantities.

Seeds of Conifers, Trees and Shrubs. Our  
list is now ready, contains all kinds of Seeds we deal  
in, with lowest prices, and sent postfree on request.



**SALZER'S PANSIES**  
Lead the World in  
Exquisite Colorings  
and Marvelous Size.  
Angel's Robe Pansy,  
a new pure white pansy  
for bordering and cemetery  
planting.  
Write for florists' and  
market gardeners whole-  
sale list.  
**JOHN A. SALZER,**  
La Crosse, Wis.

## OUR WHOLESALE CATALOGUE

— OF —

## BULBS

Of all Sorts,

## CHRYSANthemums, &c.

Is now ready. Will be sent to all applying that we know  
to be engaged in the trade—or to any furnishing us  
evidence, as cards, letter-heads or bill-heads.

**V. M. HALLOCK & SON,**  
**QUEENS, NEW YORK.**

**F. E. McALLISTER,**

— WHOLESALE DEALER IN —

Seeds For the Florist, Requisites Such as Baskets, Im- For the Green  
Market, Garden- mortelles, Grasses, house or Gar-  
and Farmer. Flowers, Bouquet d- den.  
Flumes, etc

22 Dey Street, - - - NEW YORK.

## SEGERS BROTHERS,

GROWERS OF

## HOLLAND BULBS.

OUR SPECIALTIES ARE:

Holland Hyacinths and Tulips, in any quantity; also Crocuses,  
Narcissus, Daffodils, Lilliums, Lily of the Valley, Gladiolus  
The Bride, Anemones, Ranunculus, Spiræa Japonica, etc.

References as to quality of our Bulbs, etc., to several United States Florists  
and Seedsmen.

Send for Wholesale Catalogue.

**LISSE, NEAR HAARLEM, HOLLAND.**

WHOLESALE ONLY.

NO AGENTS.

## SEEDS, BULBS, PLANTS,

SUPERIOR NORTHERN GROWN.

**CURRIE BROS., SEEDSMEN AND FLORISTS.**

Send for Catalogue.

**MILWAUKEE, WIS.**

## RELIABLE SEEDS FOR FLORISTS.

**ZIRNGIEBEL'S** Improved White Aster,  
— Improved White Perpetual Stock.  
— Improved Giant Candytuft.  
— Improved Giant Trimardeaux and  
Bugnot Fancy Pansies.

Trade packages of any of the above seeds, \$1.00 each.

**DENYS ZIRNGIEBEL, Needham, Mass.**

## FOR SALE.

**RICHARDIA ALBA MACULATA, EXTRA FINE  
FLOWERING BULBS.**

Address **JAS. MILLEY,**  
346 Masten Street, Buffalo, N. Y.

## Best Hardy Rhododendrons,

Azaleas, new Japanese Maple, Tree Peonies, Lilac  
Syringa Japonica, Prunus pissardi, Hydrangea  
Paniculata, Ampelopsis, Clematis, and all other  
choice HARDY Trees, Shrubs, Roses, etc., in any  
quantity at lowest rates.

**COLLECTIONS OF BEST HARDY SHRUBS,**  
very fine and cheap. Catalogues on application.  
**FRED. W. KELSEY,**  
308 Broadway, NEW YORK.

## NEW CHRYSANthemums

It is now generally acknowledged that

I have distributed most of the best new

Chrysanthemums of recent introduction.

I again offer fourteen new varieties of merit,  
quite distinct from any kinds now in cultivation,  
as well as all

— BEST OLDER KINDS. —

List ready January 10th.

**H. WATERER,**

IMPORTER OF PLANTS AND BULBS,  
56 North 38th Street, PHILADELPHIA, PA.

**WANTED** Every florist to try the  
new yellow Carnation  
Starlight. See advertisement in another column,  
and send for price list of this and other new and  
standard vars. to Geo. Hancock, Grand Haven, Mich.



## Cincinnati.

Freesia is in, but it is awfully hard work to get up a run for it.

J. A. Peterson of the Floral Exchange, has gone east.

A very pretty floral piece made by the Cincinnati Floral Co. was decidedly original. Upon an easel of cat-tails a velvet plaque rested. The latter was decorated with a cluster of roses, and at one side, resting upon a branch of holly, was a little owl made of violets, and natural enough looking to fly away. Beneath was a nest full of eggs.

Society is not spending much money for flowers, and the florists all complain that business is awfully slow.

REN MULFORD, JR.

## Prices of Flowers.

In spite of the paragraphs continually appearing in the daily press as to the extravagant prices of flowers, there are apparently a few left who have not yet come to the conclusion that flowers are beyond reach of modest means. As supplemental to the "full dollar's worth" published in a recent issue, one reader discounts it by telling of a small boy who came into his store with a good sized market basket, for a *nickel's* worth of "chenille" roses. Another florist, in western New York, sends an order—evidently a lady's hand writing—for "3 cents worth of pretty flowers no leaves as we have plenty of leaves." This last order was received two days before Christmas, and caps anything yet received. If this lady persists in squandering so much wealth in flowers at the holidays, her husband would be warranted in limiting her allowance for posies.

## ROSES AND PLANTS.

Before you order what you need, write for my Trade List. I have a large stock of TEAS, H. P. and MASSÉS. If you have anything to exchange, name goods, and I will reply if favorable.

E. HIPPAUD, Youngstown, O.  
The best Ventilator Apparatus, \$12.00.  
Best Steam Call Bell, \$5.00 to \$10.00.

# VAUGHAN'S

## BOOK FOR FLORISTS,

(SPRING 1888) NOW READY.


J. C. VAUGHAN, CHICAGO.

For the last five years I have given special attention to the cultivation of Asters, and the prizes and gratuities which have been awarded me by the Massachusetts Horticultural Society fully prove to what perfection I have been able to grow this superb annual. I offer the following varieties (which are the cream of the Aster family): **Traffant's Peony-Flowered Perfection**, a Victoria, and **Imbricated Pompon**. The following paragraph is from the Transactions of the Massachusetts Horticultural Society:—

AUGUST 21, 1886. "To-day was prize day for Asters, and the display exceeded any ever before recorded, both in quality and in quantity. The centre table, running the whole length of the hall, was covered by M. B. FAXON, who placed thereon for display two thousand three hundred blooms (2300), besides one hundred blooms on another table for prizes. He was awarded the FIRST PRIZES in the VANDY and VICTORIA classes, and SECOND PRIZE for POMPONS."

**Traffant's Peony-Flowered Perfection Aster.** Twenty distinct color, or in splendid mixture; per large packet 25 cents.  
**Victoria Aster.** Eighteen distinct colors in splendid mixture; per large packet 25 cents.  
**Imbricated Pompon Aster.** Twenty distinct colors in splendid mixture; per large packet 25 cents.  
**Royal Mixed Aster.** This mixture includes the above three varieties, and contains twenty five distinct shades of color; no mixture of Aster seed that has ever been sent out will give better satisfaction. For private gardeners this seed is unsurpassed, giving a great variety for a little money. For large packet 25 cents.

M. B. FAXON, Seedsman,  
Send for Catalogue. 21 So. Market Street, Boston, Mass.



### WHITE WATER LILY ROOTS

(Nymphaea Odorata.)  
\$5 00 per 100. The Trade Supplied.  
WM. F. HALSBY,  
WATER MILLS, LONG ISLAND, N. Y.



ELECTRO OF THIS CUT, \$1.50.  
Catalogue of electros of plants, flowers, designs, etc., with '87 and '88 supplements, 35 cts., with vegetable, 50 cts., which deduct from first order.

### GROWING'S PATENT BUILDING FOR HORTICULTURE



— GLAZED WITHOUT PUTTY. —  
Endorsed by the New York Horticultural Society.  
Illustrated Circular mailed on application.  
Plans and estimates given for every description of Horticultural Buildings.

H. J. GROWTAGE, BROOKLYN, N. Y.  
76 Myrtle Avenue.

Established 1837.

51st Year.

## ALL GARDEN SUPPLIES.

COMING PLANTS FOR SPRING SALES.

Secure your stock NOW and be ready for the Boom. EACH DOZ. BEN.

Abutilon Eclipse, new, flowers yellow, green markings, foliage variegated, trailing habit.....	20	\$ 1.80	\$
Abutilon Golden Pledge, rich golden yellow, free bloomer, very double.....	15	1 50	
Abutilon Thompsoni, foliage variegated, flowers double.....	10	1.00	6.00
Ageratum Maydell, very double, color deep blue.....	10	1.00	6.00
Ageratum New Pella, var., very dwarf, foliage beautiful marked.....	20	1.80	
Antirrhinum Undulatum Striatum, new, variegated foliage, wavy.....	50	5.00	
Antirrhinum Coronarium—the new double golden Marguerite.....	10	1.00	8.00
Ampelopsis Veitchi (The People's Vine), bary miniature Creeper, strong plants.....	10	1.00	8.00
Begonia Noveboracensis, new, best winter flowering, pink.....	30	3.00	
Begonia Branti, best winter flowering, white.....	20	1.80	10.00
Begonia Manicata Aurea, a grand novelty, foliage marked.....	50	5.00	
Campanula Filicolum, the fern-like climber.....	10	1.00	8.00
Camellia Japonica—Alba Plena, plants 6 to 8 inches high.....	15	1.80	12.00
Chrysanthemum, the set of 24 which received the \$300 prize in Philadelphia, 1887, for \$2.50. See catalogue for description.			
Coleus, new, John Goode, Mikado, Harry Harold, Tokio, Kressi, Yellow Jacket, None-Such, the set of seven mailed for \$1.00.....	15	1.50	10.00
Diaphne Odorata, a grand old plant, very fragrant.....	20	1.80	
Fuchsia Frau Zuehlke (Topiary Tree) called by some "Storm King".....	12	1.20	5.60
Fuchsia Nora, Thibaut, best single purple, immense size.....	20	1.80	
Gardenia Fortuna, flowers white in size like Alba Plena Camellia.....	15	1.50	
Hydrangea Ronea, color satin pink, extra fine.....	15	1.50	10.00
Ipomoea grandiflora—the new Moon Flower.....	10	1.00	8.00
Ipomoea Pfeifferiana, a new, scarce plant.....			
"Mexicanum" violet crimson, tuberous rooted.....	15	1.50	10.00
Ipomoea Leardi, blue crimson bands.....	15	1.50	10.00
Ipomoea Mortonii, all the colors combined, red, white and blue.....	15	1.50	10.00
The four Glories mailed for 50c. Glory of the day and Glories of the night.....			
Impatiens Sultan and Mariana.....	10	1.00	
Jasminum Gracillimum, the ever-blooming white, in clusters.....	15	1.50	
Lantana California, flowers yellow, very dwarf, never attaining a height over twelve feet.....	15	1.80	
Leonatus Leonurus (Lions Tail), flowers scarlet in whorls.....	15	1.50	10.00
Passiflora, Queen of the West Indies, foliage beautifully variegated.....	15	1.50	10.00
Passiflora C. Elliott, hardy white flowers.....	12	1.20	8.00
Rhynchospermum lasiocarpus, flowers white, Jasminum like, a scarce plant.....	15	1.50	10.00
Stevia folia variegata, foliage beautifully marked.....	10	1.00	6.00
Viburnum Laurestinus, white winter-flowering, scarce, old favorite.....	15	1.50	

For other plants see Wholesale Trade List, mailed free to all applicants.  
My new Descriptive Catalogue for 1888 mailed to all on receipt of 20 cents in stamps. It contains more practical information than any other published. Send for it. Address

ROBT. J. MALLIDAY,  
SEEDSMAN AND FLORIST,  
BALTIMORE CITY MD.

## A SPECIALTY. SEEDS FOR FLORISTS CAREFULLY SELECTED.

And from which the best results may be expected.

ASTER, New Pearl, pure white.....	PKT.	\$ 25
" " bright rose.....	25	
" Boston Florist's, pure white.....	25	
" " fine rose.....	10	
" Zingibeli's, white.....	10	
BALSA, Snow Ball, finest double white.....	15	
PANSY, Improved Giant, best strain in cultivation.....	50	
STOCKS, Boston Florist's Double white, superior to, and producing a larger per cent. of double flowers than any known strain.....	15	
STOCKS, Crimson King, finest double crimson.....	25	

Our strains of Cinerarias, Cyclamen, Calceolarias, Primulins, Mimulus, Verbenas, and Zinnias are of very superior selected strains.

EXCELSIOR PEARL TUBEROSES, \$1.50 per hundred, \$5.00 per thousand.

Wholesale price list for florists now ready. Send for one.

SCHLEGEL & FOTTLER,  
26 S. Market St., BOSTON, MASS.

## VERBENAS A SPECIALTY.

Largest and best stock in the country. Free from all disease.

**MAMMOTH SET.** Also some of the Best Old Sorts.

**50,000 MAMMOTH WHITE.**

Add 10 cents per dollar's worth if sent by mail.

From pots.....	VERBENAS.	per 100 per 1000	
Rooted Cuttings.....		\$ 3.00 25.00	
		1.00 8.00	
From pots.....	COLEUS.	2.50 20.00	
Rooted Cuttings.....		1.00 8.00	
PANSIES, transplanted.....			8.00

**WM. DESMOND,**

Henry Co. KEWANEE, ILL.

## Mammoth Verbenas, &c.

Verbenas, from 2-inch pots.....	Per 100	
Coleus, including J. Goodie.....	per 1000, \$15.00, \$2.00	
Petunias, 1st best double.....	3.00	
Pansies, Tricolor and Royal.....	2.50	
Isatis, finest strain.....	2.00	

**ADOLPH HIEHLE, Parkersburg, W. Va.**

**100,000**

## VERBENAS.

THE CHOICEST OLD AND NEW VARIETIES.

Fine pot plants.....	\$2.50 per 100; \$20.00 per 1,000	
Rooted cuttings.....	1.00 8.00	

— NO RUST OR MILDEW. —

✓✓✓ Packed light, and Satisfaction Guaranteed.

**J. L. DILLON, Bloomsburg, Pa.**

**FOR SALE.**

VERBENAS, clean and thrifty.....	Per 100	
Rooted Cuttings.....	per 1,000, \$8.00, \$2.00	

Orders for spring delivery booked now.

**JOSEPH E. BONSALE, Salem, Ohio.**

**THE BEST AND CHEAPEST**

## DOUBLE PETUNIA SEED

(*P. hybrida grandiflora fl. pl.*)

in the market. For sale to the trade by the grower.

**G. A. McTAVISH,**

NORTH SAANICH, B. C., CANADA.

## GLADIOLUS.

Mixed and Choice Named Varieties, by the dozen or thousand.

Send for prices; also for Wholesale Price List of

**ORNAMENTAL NURSERY STOCK.**

**SAMUEL C. MOON,**

Wholesale Nurseryman and Gladiolus Grower,

**MORRISVILLE, BUCKS CO., PA.**

## WESTERN FLORISTS

If you need any plants not quoted in this list, write to me; I have a large stock of most everything in the plant line.

**I OFFER NOW**

50,000 Geraniums, 40 varieties.....	Per 1000	\$ 2.50	
5,000 Rose Geraniums, will include a good proportion of Dr. Livingstone.....	3.00		
10,000 Chrysanthemums, 30 varieties.....	2.50		
5,000 Named Verbenas. Free of disease.....	2.00		
5,000 Coleus, 25 varieties.....	2.50		
5,000 Pansies; Royal Strain; in bud.....	3.00		
5,000 Smilax.....	2.50		
5,000 Hinz's White Carnations.....	3.00		
4,000 Double Petunias.....	5.00		
5,000 German Ivies, strong.....	3.00		

**SEND FOR TRADE LIST.**

Address

**N. S. GRIFFITH,**

**JACKSON CO. INDEPENDENCE, MO.**

(Independence is well located for shipping, being 8 miles east of Kansas City.)

## DOUBLE WHITE PETUNIA,

**MRS. G. DAWSON COLEMAN.**

Endorsed by such florists as Dreer, Henderson and Halliday, as the finest double white ever produced. Excels in shape, pure white in color. For grow work and bedding it has no equal. Mail, five for 75c; eight for \$1.00.

Geranium Mad. Salleri.....	per doz.	50 Mail	
Mad. Pollock.....	50		
Tuberose Bulbs, 3-in. and over.....	per 100, 1.50 Exp.		
" " 4-in. ....	per doz., 1.50 Exp.		
" " 6-in. ....	per 100, 2.00 Exp.		
Eulalia Zebrina.....	per doz., 1.25 Mail		

**THOS. G. HAROLD, Kingston, Somerset Co. Md.**



## MAMMOTH VERBENA SEED

We have succeeded in growing SEED of this splendid strain which we now offer for the first time. The seed stock we saved ourselves in 1886 from named plants, and this product we guarantee to be the **TRUE MAMMOTH** Variety of mixed colors.

Trade pkt. 50c.; 1/4-oz. \$2.00; per oz. ....	\$6.00
Verbena, Dreer's Choicest Strain, pkt, 50c.; oz. .	4.00
SMILAX. New Crop. Per ounce .....	1.50
Centaurea Gymnocarpa. New Crop. 1,000 Seeds ..	.60
" Candidissima. ....	.75

Wholesale Price List of Flower Seeds ready NOW, will be mailed all applicants in the trade.

**HENRY A. DREER, SEEDSMAN AND FLORIST,  
PHILADELPHIA.**

## \* NEW WHITE CARNATION \*

**WM. SWAYNE AND L. L. LAMBORN.**

The two best white carnations ever offered. **EARLY, FREE AND CONTINUOUS BLOOMERS.** Stock of these excellent sorts will be ready March 1st, 1888. Orders booked now, and filled strictly in rotation as received, Price, \$25.00 per 100.

Send for Cut and Descriptive List.

Wholesale price list of rooted cuttings of other leading sorts ready Jan. 1st.

**WILLIAM SWAYNE, Kennett Square, Pa.**

## TO THE TRADE.

Perfectly healthy and vigorous stock of

### VERBENAS

Mammoth and others, strong stock plants, from

3-inch pots, \$5.00 per 100; \$25.00 per 1,000. Rooted

Cuttings, \$1.00 per 100; \$7.00 per 1,000.

Carnations—Hinz's White, well root.

ed from flats ..... \$ 2.50 \$20.00

Geraniums, best new dbl. & spr. .... 1.00 35.00

Cannas, five best sorts, strong bulbs. .... 2.00 35.00

Puechias, 12 leading sorts, 2 1/2-in. pots. .... 3.00 25.00

Pelargoniums, 10 good market sorts. .... 5.00

2 1/2-inch, strong..... 5.00

Fassifloras—New Constante Elliott..... 5.00

**PAUL BUTZ & SON, New Castle, Pa.**

## TOBACCO STEMS FOR FLORISTS,



FOR SALE, packed in  
bales 20 to 24 lbs.

NO CHARGE for deliver-  
ing to depots.

**PRICE:**

From \$5 to \$10 per ton,  
according to quanti-  
ties.

ADDRESS

**P. C. FULWEILER,**

716 Arch Street, PHILADELPHIA, PA.

Mention American Florist.

## FOR SALE CHEAP!

CARNATIONS AND VERBENAS.

Most approved sorts.

✓✓✓ Price list free.

**J. G. BURROWS, Fishkill, N. Y.**

## VERBENAS.

Our Verbenas are free from mildew; perfectly

healthy, and variety of color unsurpassed.

Per 100, 1.00

Fine Collection, stock plants, 40 varieties, \$5.00; \$25.00

rooted cuttings 40 1.00; 8.00

Coleus, rooted cuttings, fine collection.....

labeled..... 1.25; 10.00

Geraniums, double and single, 3-in. pots, 4.00; 35.00

Amelopsis { Very full, pot-grown, strong plants

\$5.00 to \$8.00 per 100.

Quinquifolia, pot-grown, strong

plants, \$5.00 per 100.

ROSES { Bon Silene, S. d'un Ami, Pearl,

Saladin, Niphetos, etc. From 1-

inch pots, \$5 per 100; \$15 per 1,000.

Brides, from 2 1/2-in. pots..... per 100, \$5.00

Pans. Gaudier, 8 in. .... 8.00

Wholesale list of other Roses, Carnations,

Rooted Cuttings, and general florists' stock on

application.

**I. C. WOOD & BRO., Fishkill, N. Y.**

English Ivies, strong, from 4-inch pots..... Per 100

Trailing Vines, strong roots for propagating..... 4.00

bushy, 5-inch pots..... 15.00

Rosemary, fine plants, 5-inch pots..... 15.00

Primula, double white, 4-inch plants, 4-inch pots. 15.00

Curelino recurvata, 2 1/2 in. high, 4-inch..... 8.00

Pearl Tuberose Bulbs, 2nd size, averaging 5 inches,

per thousand, \$4.00.

Pearl Tuberose Sets, per bushel, \$1.50.

**A. R. REINEMAN & BRO., 39 Fifth Ave., Pittsburg, Pa.**

## GERANIUMS.

Twenty of the best varieties for bedding or market

purposes, at \$5.00 per hundred, \$40 per thousand.

### VERBENAS.

Twelve best and most distinct varieties, \$3.00 per

hundred; \$25.00 per thousand. Rooted cuttings

\$7.00 per thousand. Fine strong plants of

Alternanthera par. major, Ampelopsis Veitchii,

Myrtus Multiflorus, Myrtus Communis,

and Smilax.

Prices given on application.

**HOLZNAGLE & NOEL,**

Whitewood P. O., Mich., (near Detroit.)

Mention American Florist.

Per 100

SMILAX, 2 1/2-inch pots, strong..... \$ 2.50

CINERARIAS, choice Hybrid, 3-inch, strong..... 5.00

or will exchange for Tea Roses or Carnations.

**JOHN B. FABER, KANKAKEE, ILL.**

## NOW READY!

### SUPERB VERBENAS.

All nice, clean, healthy. The finest in America. All

the BEST varieties, including Mammoth. Will

make Stock plants for Spring.

\$2.50 per 100, \$20.00 per 1,000. Cash with

order or C. O. D.

**F. WALKER & CO.,**

New Albany, Ind.

## RHODODENDRONS,

## ROSES AND YOUNG STOCK

FOR FLORISTS AND NURSERYMEN.

We have in our cellars, ready for immediate ship-

ment, a very fine lot of Grafted Rhododendrons

with bloom buds. Very clean; also, some extra

strong **Yermine H. P. Roses** two years old,

including such varieties as Mme. Gabr, Luize, Gen-

eral, Jacqueminot, Desboudet, Paul Neyron, also some

fine **Free Roses**; also, a large and complete as-

sortment of Stock, Seedlings, Etc., both Fruit

and Ornamental, including some one year grafts

of the new Double Flowering Horse Chest-

nut. Send for our Special Price List.

**W. S. LITTLE, Commercial Nurseries,**

Rochester, New York.

## GARDEN, FIELD AND FLOWER SEEDS.

Market Gardeners' and Florists' Seeds a Specialty.

## GARDEN TOOLS, SEEDERS, ETC.

SEND FOR LIST OF FLORISTS SEEDS.

**JAMES KING,**

170 Lake St., CHICAGO, ILL.

We offer a Few Hundred of

## CLEMATIS \* FLAMULA,

Strong plants, two years, at \$10.00, Cash.

**J. H. CAMPBELL & SONS,**

3601 Germantown Ave., PHILADELPHIA, PA.



Philadelphia.

The Germantown, Philadelphia, Horticultural Society proposes to hold a large chrysanthemum show in November next.

In connection with this, as showing what a little talk will do, it may be said that the project owes its origin to a conversation among a few gardeners and florists of the place, who believed it possible to hold such a show. The income of the society being expended on its monthly exhibitions, they asked the appointment of a committee to see if sufficient voluntary financial support could not be obtained for the purpose. The request was granted, and the next monthly meeting the committee reported ample support promised, and so the society has authorized the committee to go ahead and perfect their arrangement for the exhibition.

I mention this so fully both for the reason stated above and also to show that when the dollars are so freely contributed as they were here, horticulture has still a strong hold on the esteem of our people.

JOSEPH MEEHAN.

# PLANTS and BULBS

## SPECIALTIES:

**BULBS** Gloxinia Crassifolia Grandiflora, Fuchs Caladaneus, the newest sorts. Tuberous Begonia, single & double. Achimenes, six choice varieties.

**FERNS** In all sizes of the best selling sorts.

**PALMS** The largest stock in America in all the best decorative varieties of different sizes.

**AZALEAS** The finest varieties in trained crowns, three sizes.

**PETUNIAS** Dree's Standard collection of doubles, in 25 varieties.

**VERBENAS** Twelve of the cream in clean, healthy plants.

**ROSES** A large stock of the leading kinds—especially Papa Gontier, the Bride and La France, for forcing.

Imported low budded plants of the sorts that are always good and reliable.

**PRICES** Are as low as good stock can be sold, which please refer to in

**DREE'S WHOLESALE PRICE LIST FOR FLORISTS.** Now Ready, offering a full line of all profitable stock for florists for their spring trade, mailed free. Address

**HENRY A. DREE,**  
714 Chestnut St., PHILADELPHIA.

Mention American Florist.

## SPECIAL LIST.

Carnations, Hinz's White, 2-inch pots.....	Per 100	\$2.00
Geraniums, double and self, 10 var., 2 1/2-in. pots.....		3.00
Roses, American Beauties, 2 1/2-in. pots.....		6.00
" Cameros, Perles, souv. d'un Ami, 3 1/2-in. pots.....		6.00
" S. de St. Pierre, The Bride, Sunset.....		3.00
Coleus, 24 varieties.....		3.00
Feverfew, Little Gem.....		2.50

Send for Special Wholesale Price List to Florists only.

A. GIDDINGS, DANVILLE, ILL.

Rooted Cuttings of leading sorts Coleus, strong and clean.....	per 100,	\$ 1.25
Swanley White Violets.....	"	.75
Vaney major var., two plants in 4-in. pot.....	"	6.00
Tuberous Begonia, 4 1/2-in. diam. and over.....	per 1,000,	10.00
" " 4 1/2-in. to 4-in. diam.....	"	8.00
" sets, clean.....	per 100,	10.00
Begonia Saundersii, 4 1/2-in. pots.....	per 100,	10.00
" Metallica.....	"	10.00
" " extra.....	"	12.00
Achyranthes Emersonii, 2 1/2-in. pots.....	"	3.00

JOHN CURWEN, JR., Villa Nova, Pa.

## CARNATIONS.

ROOTED CUTTINGS NOW READY.

HINZE'S WHITE, HENDERSON, PRES.  
DEGRAW, PRES. GARFIELD, LA PURITE  
\$1.25 per hundred; \$10.00 per thousand.

C. B. HUMPHREY,  
Walesville, Oneida Co., N. Y.

# THE NEW CARNATION

## \* WHITE GEM. \*

Awarded a First-Class Certificate of Merit by the Mass. Hort. Society Nov. 27, '87.

## READ WHAT IS SAID

About WHITE GEM by men who have seen it.

DEAR SIR:—After seeing your new Carnation growing in your houses, I very much regret that I did not make you a more tempting offer for your entire stock of "White Gem." It certainly promises to be the very finest White Carnation in the market. The plant is of fine compact habit, healthy and vigorous, and bears a seedling from Scarlet Gem, it should prove a free and constant bloomer. The flower is magnificent, being of the purest white, extremely large, full form, and elegantly fringed, its fragrance delightful. The calyx being much elongated; never bursts, and the flower-stems are long and graceful. "White Gem" comes at a time when just such a first-class Carnation is most needed. Book me your order for 200 plants.

Yours very truly,

JOHN FOTTLER, JR.  
Pres't Am. Seedsman's Association.

BOSTON, January 7th, '88.

GEO. E. BUXTON, Dear Sir:—I have been much interested in your new Carnation "White Gem," and from what I have seen of it, I believe it will prove a very valuable market variety. In size, form and purity of color it is A 1, and its keeping qualities after being cut are remarkable. I predict a great sale for it.

Yours truly,

NESHAM, MASS., January 9th, '88.  
DENYS ZIRNGIBEL.

"White Gem" in strong plants ready March 15th. Orders booked now and filled in strict rotation, at \$2.00 per dozen, \$15.00 per hundred.

GEO. E. BUXTON,  
Nashua, N. H.

PATTEN & CO.,  
Lowell, Mass.

## CARNATIONS.

—CUT BLOOMS OF—

BUTTERCUP, CENTURY, SEAWAN, GRACE WILDER, PORTIA, CHESTER PRIDE, ETC., Long or short stems, at market price.

ROOTED CUTTINGS now ready of Buttercup at \$3.00 per 100, \$25.00 per 1,000. Of Century, Grace Wilder, Hinz's White, Seawan, Portia, Jeannette, and Chester Pride, \$2.00 per 100, \$15.00 per 1,000.

NIAGARA GRAPE CUTTINGS. Mature wood, two eyes, 6 to 8 inches long, \$1.25 per 100 by mail; \$1.00 per 100, \$8.00 per 1,000 by express. GUARANTEED GENUINE. CHAS. T. STARR, Avondale, Chester Co., Pa.

## THIS INTERESTS YOU.

### "STARLIGHT."

The new light yellow CARNATION; clear of stripes or markings; of vigorous growth, early and continuous bloomer; seventy-five per cent. of flowers on long stems, and never bursts its calyx. Try it. Send for price list of Starlight and fifty other new and standard varieties to

GEO. HANCOCK, Grand Haven, Mich.

## NEW CARNATIONS.

Orders booked for the two best whites Wm. SWAYNE, L. L. LAMBORN, delivered after March 1st, '88. \$25.00 per 100. CUTTINGS.—Hinz's, Henderson and Snowden, \$1.50 per 100; \$10.00 per 1,000. Send for price list of leading Carnations.

LEROY L. LAMBORN, ALLIANCE, Stark Co., Ohio.

## CARNATIONS. ALEGATIERE CARNATIONS.

ROOTED CUTTINGS NOW READY.

Allegatier, Scarlet, \$2.00 per 100. Rosalind, beautiful cherry, \$2.00. Hinz's White, Grace Wilder, Springfield, Snowden and Hindsdale, \$1.00 per 100. Andalusia, beautiful lemon yellow, deeply fringed, \$5.00 per 100. All clean, healthy stock. Address

H. B. CHITTY,  
Paterson, New Jersey.

## FOR SALE.

A FINE ASSORTMENT OF

## BEDDING PLANTS AND TUBEROSE BULBS.

Fine large flowering Pansy Plants on 10-in. transplants, \$1.50 per 100, or \$8.00 per 1,000. Large transplants Pansies, \$2.00 per 100. Swanley White Violets, large bunches, in bud and bloom at \$2.50 per 100, or will take Carnations in exchange for Violets.

M. TRISCHLER & SONS, Nashville, Tenn.

## PANSIES AND COLEUS

BY THE THOUSAND.

PANSIES, from 2-inch pots.....	Per 100	\$ 2.00
Transplants.....	per 100	15.00
COLEUS, including Verschaffeltii and Golden Bordered.....	2.00	15.00
BELOUA METALLICA, good plants.....	2.00	30.00

J. W. DUDLEY & SON, Parkersburg, W. Va.

## NEW MONTHLY CARNATION

### "ELMONT."

This new Crimson Carnation is a most vigorous grower, of compact habit, not curled like "Crimson King;" an exceedingly free bloomer, and the flowers are large, fringed, and of a rich crimson color, clove-scented, and retaining their brightness until they are entirely withered. Calyx small, does not burst. Received First Premium for "Best New Seedling," New York Hort. Society, Nov. 1887.

## NEW STRIPED CARNATION

### "VOLUNTEER."

Large white, flower fringed, striped with rose, upright and compact grower; clove fragrance, and free bloomer; undoubtedly the best striped carnation yet offered.

For prices, etc., send for full descriptive circular to

CHAS. KRICK,  
1107 Broadway, BROOKLYN, N. Y.

## CARNATIONS.

ROOTED CUTTINGS will be furnished to the trade as usual in season.

FLORISTS at all times in quantity.

For send for price list.

JOSEPH RENARD,  
Successor to THOS. F. SEAL,  
UNIONVILLE, Chester Co., Pa.

## CARNATIONS.

ROOTED CUTTINGS OF

Edwardsii, Scarlet Gem, Philadelphia Red, Crimson King, Snowden, etc., \$1.25 per 100; \$10.00 per 1,000. Portia, Duke of Orange, Chester Pride, etc., \$1.50 per 100; \$12.50 per 1,000. FLORISTS ready March 15th at double the above rates. Pips if desired at half these rates. Many other new and desirable sorts. Send for price list and descriptions. Niagara Grape Vine \$1.50 per 1,000. W. R. SHELMIER, Avondale, Chester Co., Pa.

## \* TO THE TRADE \*

200,000 ROSES FOR SALE.

Fine lot of Geraniums for bedding and marketable purposes, at \$5 per 100.

## VERBENAS

20 vars., embracing all the leading sorts.

## FERNS

A fine lot of 4-inch Adiantum concinnum latum, at \$10.00 per 100.

PTERIS TREMULA, 2 1/2-in., \$4 per 100. ARGYREA, " \$6 "

GEO. W. MILLER,  
WRIGHT'S GROVE, CHICAGO.





Overhead Piping.

If friend Holley believes so thoroughly in overhead heating (page 202) why did he not heat his house that way entirely, or at least put all of his piping overhead? He has talked this some time—the Florist giving his views as long ago as the Philadelphia convention.

Wishing to experiment a little in this line this fall, I piped a small lean-to 6 x 12, entirely overhead, close to the glass. I then planted a mixed lot of carnations right in the border; they have hardly as much room as they want, therefore are closer to the pipes than I would wish, nevertheless up to the present time they look as if they enjoyed it much, and I notice they follow the steam pipes the same as they do the sun. I expected to try the same quantity with the pipes entirely underneath, but circumstances prevented it. Of course it is too short a time to know definitely how it works on the whole, but it looks now as if it were a good way of growing them.

R. E. S.

SAN FRANCISCO.—At Golden Gate Park there is being erected a "Childrens play house" at a cost of \$35,000. The money was bequeathed for the purpose by the late Senator Sharon. Many orchids are now in bloom in the park conservatories and all other plants there are in excellent condition.

## BARBED GLAZIER POINTS.

### FOR SALE IN

BOSTON, MASS. . . . by Wm. J. STEWART,  
67 Bromfield Street.  
PROVIDENCE, R. I. . . . .  
CHICAGO, ILL. . . . .

Retail at 50c. per 1,000. 5,000 will be sent by Express free on receipt of \$2.50. PINCHERS, 35c. Each.

B. B. CHANDLER,

Patentee and Manufacturer,

HYDE PARK, MASS., U. S. A.

Mention American Florist.

## SOMETHING NEW.

### OUR 3-PIECE BOX

For FLORISTS and NURSEYMEN,

Which is the pride of the Florists.

ALSO LOCK CORNER BOXES OF ALL SIZES.

Sample and price list free.

SMITH & SMITH,

KENTON, Hardin Co., OHIO.

## THE FLORIDA WEEKLY TIMES.

EIGHT PAGES.

The Best and Cheapest Family Weekly in the South.

Contains the cream of the daily for the week. Only \$1.00 per year, 50c. for six months. A colored Map of Florida free to all yearly subscribers.

LIBERAL PREMIUMS OFFERED.

Send for circulars or sample copies.

### THE FLORIDA

FARMER and FRUIT GROWER.

The Great Agricultural Paper of the State.

And unsurpassed in the South. Practical Illustrations in each number. Indispensable to every farmer, gardener and fruit grower.

One year \$2.00; six months \$1.00; three months 50c. Enlarged and form changed to a quarto, convenient size for binding.

Sample copies of either free to any address.



## FOR THE TRADE. FLORAL WIRE DESIGNS.

JAS. GRIFFITH,

THE :: PIONEER :: MANUFACTURER :: IN :: THE :: WEST,

305 Main Street.

CINCINNATI, OHIO.

SEND FOR WHOLESALE PRICE LIST.



## GURNEY'S NEW HOT WATER HEATER.

THE CHEAPEST AND BEST FOR

Greenhouses, Conservatories and DWELLING HOUSES.

THE GURNEY HEATERS present more water surface to the direct action of the fire than any others (known to us) in use. They are the easiest to keep clean, and with due attention almost any kind of fuel may be used.

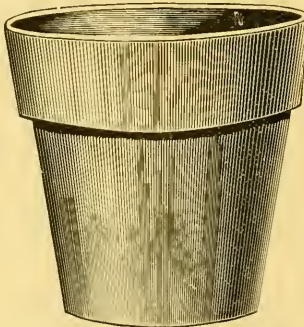
EASILY REGULATED. SIMPLE AND EFFICIENT SAFE AND ECONOMICAL.

Manufactured by the GURNEY HOT WATER HEATER CO.,

237 FRANKLIN STREET, BOSTON, MASS.

JOHN A. FISH, Managing Director. SEND FOR PAMPHLET AND PRICE LIST.

SELLING AGENCIES.—M. H. Johnson, 140 Center Street, New York. Rice & Whitacre Manfg. Co., 42 and 4 W. Monroe Street, Chicago (West and Southwest). T. K. Chase, 31 Edmund Place, Detroit, Mich. (for Michigan and Ohio). Wm. Gardiner & Co., Portland, Oregon.



## THE WHILLDIN POTTERY COMPANY,

713 and 715 Wharton St.,

PHILADELPHIA, PA.

— USE —

The Improved Rim Pot,

AND SAVE ONE-HALF THE BREAKAGE.

Send for Illustrated Price List.

Samples, with sizes marked sent on application.

## SYRACUSE POTTERY.

Thumbs.....\$2.54	Special 3-in. 4.61	4 -inch..... 7.91
2 1/2-inch..... 3.55	5 -inch..... 4.75	4 1/2-inch..... 10.83
2 3/4-inch..... 3.87	3 1/2-inch..... 8.29	5 -inch..... 13.75

Above prices per 1,000, delivered free on cars. We ship all over the U. S. Free samples with first order. Order a trial crate. If you send check add 10c. exchange. Send for frt. rates and list of prices at which we pack to order assorted sizes in a crate, and for list of 17 ready packed crates. Notice that we sell at the above prices only in

### READY PACKED CRATES

Shipped at buyer's risk and freight; cash with order.

PRICES BY THE CRATE: 4, 150 Thumbs, \$8.00;

2,655 2 1/2-inch, 5 1/2-inch, 1,000 4-inch, 4,475;

1,875 2 3/4-inch, 7,250; 3 1/2-inch, 3,900;

1,300 special 3-in., 6,000; 3 1/2-inch, 4,400;

1,150 5-inch, 5,500; 6-inch, 5,500;

875 3 1/2-inch, 5,500; 1,500 No. 3 Rose, 7,000.

J. N. PERKINS, Manager, Syracuse, N. Y.

### HAND TURNED POTTS

From HILFINGER BROS.' POTTERY,

FORT EDWARD, N. Y.

PRICES PER HUNDRED:

2-in. 40c., 2 1/2-in. 50c., 3 1/2-in. 65c., 4-in. 85c., 5-in. \$1.38,

6-in. \$2.25, 7-in. \$4.00, 8-in. \$5.00, 9-in. \$6.50, 10-in. \$11.50,

12-in. \$22.50, 14-in. \$30.00. Cylinders for Cut Flowers,

10x4 \$1.20, 11x5 \$1.50 per doz. We pack in crates which

are very strong. No charge for packing. Our pots

are well burnt and strong. TERMS CASH. Address

HILFINGER BROS., Fort Edward, N. Y.

## D. C. SCOFIELD,

— MANUFACTURER OF —

Improved \* Greenhouse

\* FLOWER POTS \*

NEW BRIGHTON, PA.,

Offers to the Trade the BEST

Quality of Improved Shoulder Pot

in the market at the

LOWEST PRICES EVER OFFERED.

SEND FOR PRICE LIST.

Orders will receive prompt and careful attention and satisfaction is warranted in every respect.

### BOUND VOLUMES OF

THE

AMERICAN FLORIST

VOLUME II.

Handsomely bound in cloth with leather back and corners, and title lettered on back in gilt, may now be had from this office.

Price, \$2.25.

AMERICAN FLORIST CO.,

54 LA SALLE ST. CHICAGO.

## HALES' MOLE TRAP

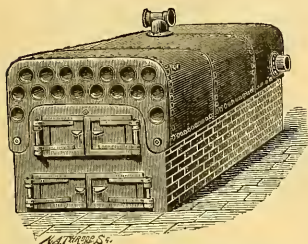
For destroying ground moles in lawns, parks, gardens and cemeteries. The only PERFECT mole trap in existence. Guaranteed to catch moles where all other traps fail. Sold by seedsmen, Agricultural Implement Houses, dealers, or sent by express on receipt of \$2.00 by H. W. HALES, RIDGEWOOD N. J.

ESTABLISHED 1854.

**Devine's Boiler Works**

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers.



Capacity from 350 to 10,000 feet of four-inch pipe.  
Send for New List.

**PETER DEVINE,**

387 S. CANAL ST.,

CHICAGO.

ESTABLISHED, 1866.

Floral Wire Designs,

Manufactured by

**N. STEFFENS,**

335 East 21st Street, - NEW YORK.

**Conservatories**

GREENHOUSES, ETC.

Erected in any part of the U. S. or Canada  
Glazed on the

Helliwell Pat. Imperishable System

OR WITH PUTTY.

For further testimonials, illustrated catalogue or estimates address

**JOSEPHUS PLENTY.**  
HOPTICULTURAL AND SKYLIGHT WORKS.

Offices, 144 Pearl Street, NEW YORK.

**GREENHOUSE HEATING.**

BY A. B. FOWLER.

Explains fully all the best systems of heating greenhouses by both hot water and low-pressure steam. Tells you the points to consider in selecting an apparatus. How to adjust same to various locations gives the results of the latest scientific experiments. Shows how to compute the number of feet of pipe required for a given space; draft and other important matters.  
It is highly commended by Mr. John Thorpe and others. Postpaid, 75c.

Send on receipt of price. Address,  
**AMERICAN FLORIST,**  
CHICAGO.

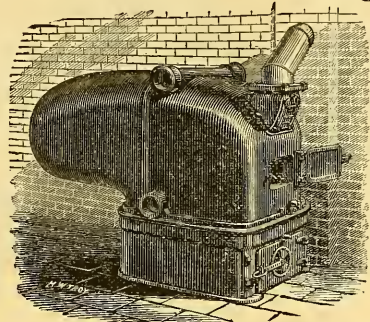
Delegates to the next  
convention will travel  
via the **Pullman Car Line**  
TO AND FROM  
Louisville, Indianapolis, Cincinnati and the winter  
resorts of Florida and the  
South. For full information  
address

**MONON ROUTE**

E. O. McCormick, Gen. Passenger Ag't, Chicago.

**Greenhouse Heating AND Ventilating****HITCHINGS & CO.**

233 Mercer Street, New York.



Send 4 cents postage for Illustrated Catalogue.

Ride Patterns of Boilers,

Eighteen Sizes,

Corrugated Pipe Box Boilers

Saddle Boilers,

Conical Boilers,

Base Burning Water Heaters

Perfect Sash Raising Apparatus.

**FLORISTS' PRICE LIST FOR 1888,**

FROM

WILLIAM MECHWART,

Terra Cotta Works,

143 TO 147 LIBERTY STREET

CHICAGO, ILL.



2 inch Pots, per 100	2 1/2-in. wide by 2 1/2-in. high	\$3.50
3 " " " "	3-in. " " "	4.00
4 " " " "	3 1/2-in. " " "	4.50
5 " " " "	4-in. " " "	5.00
6 " " " "	4 1/2-in. " " "	5.50
7 " " " "	5-in. " " "	6.00
8 " " " "	5 1/2-in. " " "	6.50
9 " " " "	6-in. " " "	7.00
10 " " " "	6 1/2-in. " " "	7.50
11 " " " "	7-in. " " "	8.00
12 " " " "	7 1/2-in. " " "	8.50
13 " " " "	8-in. " " "	9.00
14 " " " "	8 1/2-in. " " "	9.50
15 " " " "	9-in. " " "	10.00
16 " " " "	9 1/2-in. " " "	10.50
17 " " " "	10-in. " " "	11.00
18 " " " "	10 1/2-in. " " "	11.50
19 " " " "	11-in. " " "	12.00
20 " " " "	11 1/2-in. " " "	12.50
21 " " " "	12-in. " " "	13.00
22 " " " "	12 1/2-in. " " "	13.50
23 " " " "	13-in. " " "	14.00
24 " " " "	13 1/2-in. " " "	14.50
25 " " " "	14-in. " " "	15.00
26 " " " "	14 1/2-in. " " "	15.50
27 " " " "	15-in. " " "	16.00
28 " " " "	15 1/2-in. " " "	16.50
29 " " " "	16-in. " " "	17.00
30 " " " "	16 1/2-in. " " "	17.50
31 " " " "	17-in. " " "	18.00
32 " " " "	17 1/2-in. " " "	18.50
33 " " " "	18-in. " " "	19.00
34 " " " "	18 1/2-in. " " "	19.50
35 " " " "	19-in. " " "	20.00
36 " " " "	19 1/2-in. " " "	20.50
37 " " " "	20-in. " " "	21.00
38 " " " "	20 1/2-in. " " "	21.50
39 " " " "	21-in. " " "	22.00
40 " " " "	21 1/2-in. " " "	22.50
41 " " " "	22-in. " " "	23.00
42 " " " "	22 1/2-in. " " "	23.50
43 " " " "	23-in. " " "	24.00
44 " " " "	23 1/2-in. " " "	24.50
45 " " " "	24-in. " " "	25.00
46 " " " "	24 1/2-in. " " "	25.50
47 " " " "	25-in. " " "	26.00
48 " " " "	25 1/2-in. " " "	26.50
49 " " " "	26-in. " " "	27.00
50 " " " "	26 1/2-in. " " "	27.50
51 " " " "	27-in. " " "	28.00
52 " " " "	27 1/2-in. " " "	28.50
53 " " " "	28-in. " " "	29.00
54 " " " "	28 1/2-in. " " "	29.50
55 " " " "	29-in. " " "	30.00
56 " " " "	29 1/2-in. " " "	30.50
57 " " " "	30-in. " " "	31.00
58 " " " "	30 1/2-in. " " "	31.50
59 " " " "	31-in. " " "	32.00
60 " " " "	31 1/2-in. " " "	32.50
61 " " " "	32-in. " " "	33.00
62 " " " "	32 1/2-in. " " "	33.50
63 " " " "	33-in. " " "	34.00
64 " " " "	33 1/2-in. " " "	34.50
65 " " " "	34-in. " " "	35.00
66 " " " "	34 1/2-in. " " "	35.50
67 " " " "	35-in. " " "	36.00
68 " " " "	35 1/2-in. " " "	36.50
69 " " " "	36-in. " " "	37.00
70 " " " "	36 1/2-in. " " "	37.50
71 " " " "	37-in. " " "	38.00
72 " " " "	37 1/2-in. " " "	38.50
73 " " " "	38-in. " " "	39.00
74 " " " "	38 1/2-in. " " "	39.50
75 " " " "	39-in. " " "	40.00
76 " " " "	39 1/2-in. " " "	40.50
77 " " " "	40-in. " " "	41.00
78 " " " "	40 1/2-in. " " "	41.50
79 " " " "	41-in. " " "	42.00
80 " " " "	41 1/2-in. " " "	42.50
81 " " " "	42-in. " " "	43.00
82 " " " "	42 1/2-in. " " "	43.50
83 " " " "	43-in. " " "	44.00
84 " " " "	43 1/2-in. " " "	44.50
85 " " " "	44-in. " " "	45.00
86 " " " "	44 1/2-in. " " "	45.50
87 " " " "	45-in. " " "	46.00
88 " " " "	45 1/2-in. " " "	46.50
89 " " " "	46-in. " " "	47.00
90 " " " "	46 1/2-in. " " "	47.50
91 " " " "	47-in. " " "	48.00
92 " " " "	47 1/2-in. " " "	48.50
93 " " " "	48-in. " " "	49.00
94 " " " "	48 1/2-in. " " "	49.50
95 " " " "	49-in. " " "	50.00
96 " " " "	49 1/2-in. " " "	50.50
97 " " " "	50-in. " " "	51.00
98 " " " "	50 1/2-in. " " "	51.50
99 " " " "	51-in. " " "	52.00
100 " " " "	51 1/2-in. " " "	52.50

CACTUS AND BEGONIA POTS.

4-inch.....per 100	\$1.00
5 " " " "	1.50
6 " " " "	2.00
7 " " " "	2.50
8 " " " "	3.00
9 " " " "	3.50
10 " " " "	4.00
11 " " " "	4.50
12 " " " "	5.00
13 " " " "	5.50
14 " " " "	6.00
15 " " " "	6.50
16 " " " "	7.00
17 " " " "	7.50
18 " " " "	8.00
19 " " " "	8.50
20 " " " "	9.00
21 " " " "	9.50
22 " " " "	10.00
23 " " " "	10.50
24 " " " "	11.00
25 " " " "	11.50
26 " " " "	12.00
27 " " " "	12.50
28 " " " "	13.00
29 " " " "	13.50
30 " " " "	14.00
31 " " " "	14.50
32 " " " "	15.00
33 " " " "	15.50
34 " " " "	16.00
35 " " " "	16.50
36 " " " "	17.00
37 " " " "	17.50
38 " " " "	18.00
39 " " " "	18.50
40 " " " "	19.00
41 " " " "	19.50
42 " " " "	20.00
43 " " " "	20.50
44 " " " "	21.00
45 " " " "	21.50
46 " " " "	22.00
47 " " " "	22.50
48 " " " "	23.00
49 " " " "	23.50
50 " " " "	24.00
51 " " " "	24.50
52 " " " "	25.00
53 " " " "	25.50
54 " " " "	26.00
55 " " " "	26.50
56 " " " "	27.00
57 " " " "	27.50
58 " " " "	28.00
59 " " " "	28.50
60 " " " "	29.00
61 " " " "	29.50
62 " " " "	30.00
63 " " " "	30.50
64 " " " "	31.00
65 " " " "	31.50
66 " " " "	32.00
67 " " " "	32.50
68 " " " "	33.00
69 " " " "	33.50
70 " " " "	34.00
71 " " " "	34.50
72 " " " "	35.00
73 " " " "	35.50
74 " " " "	36.00
75 " " " "	36.50
76 " " " "	37.00
77 " " " "	37.50
78 " " " "	38.00
79 " " " "	38.50
80 " " " "	39.00
81 " " " "	39.50
82 " " " "	40.00
83 " " " "	40.50
84 " " " "	41.00
85 " " " "	41.50
86 " " " "	42.00
87 " " " "	42.50
88 " " " "	43.00
89 " " " "	43.50
90 " " " "	44.00
91 " " " "	44.50
92 " " " "	45.00
93 " " " "	45.50
94 " " " "	46.00
95 " " " "	46.50
96 " " " "	47.00
97 " " " "	47.50
98 " " " "	48.00
99 " " " "	48.50
100 " " " "	49.00

HANGING BASKETS, DECORATED, 8-in., per doz. \$1.20; 9-in., per doz. \$1.80.  
No charges for packing up to 4-in.; from 5-in. to 15-in. 10 per cent. Cash with order, 5 per cent. discount.

**SLATE AND IRON****BENCHES  
FOR GREENHOUSES.**

Write for Circular.

**CHAS. S. PRICE,**  
LANSDOWNE, PA.

JOHN N. MAY, Summit, N. J.  
SIEBRECHT & WADLEY, New York.  
CRAIG & BRO., Philadelphia, Pa.  
HILL & CO., Richmond, Ind.  
J. C. VAUGHAN, Chicago.

Mention American Florist.

**SASH BARS.**  
IN EITHER PINE OR CYPRESS.

We carry a large stock in

12, 14 and 16 FOOT LENGTHS,  
CLEAR CYPRESS \$2 per 100 ft.  
1st & 2d Cypress \$1.65 " "

**VENTILATORS**

Made to Order Write for Estimates.

**JOHN L. DIEZ & CO.,**  
530 N. Halsted St., CHICAGO.**Ives' Putty Machine.**

Patented Jan. 8, 1887.

The best device ever invented for laying putty. With this you can make old leaky sash perfectly tight without removing the glass. It will do the work of five men in bedding glass.

Sent by Express on receipt of price, \$3.00.

**J. H. IVES, DANBURY, CONN.**



## Index to Advertisers.

Advertising Rates, etc.	207
Aldrich, A. C.	31
Allen, C. E.	31
Allen, S. L. & Co.	39
Allen, W. S.	31
Bailey, F. A.	39
Bayersdorfer, M. M. & Co.	39
Beard, E. J.	35
Benz, Albert	35
Berger, H. H. & Co.	39
Blanc, A.	32
Bonsall, Jos. E.	33
Boynton, W. D.	35
Boynton, Jas. L.	35
Brackenhizer & Co.	35
Brugg, B. L. & Co.	39
Burpee, W. A. & Co.	39
Burrows, J. G.	33
Butz, Paul & Sons	33
Buxton, Geo. B.	34
Camphell, J. H. & Sons	33
Carquodly, J. D.	38
Chandler, B. B.	39
Chester Floral Co.	39
Chitty, H. E.	34
Clark Bros.	39
Connolly, John	39
Crane, A. H.	31
Croscup & West Eng. Co.	39
Carrie Bros.	37
Curwen, John Jr.	34
Desmond, Wm.	33
De Veer, J. A.	35
Devine, Peter	37
Diez, John L. & Co.	37
Dillua, J. L.	35
Dine & Conrad Co.	35
Dreer, J. A. & Co.	33
Dudley, J. W. & Son.	34
Elliot, B. A. & Co.	39
Ely Z. De Forest & Co.	38
Exeter Mach. Wks.	38
Faber, John B.	35
Fassett, F. E. & Bro.	35
Faxon, M. B.	39
Ferry, D. M. & Co.	39
Fink & Co.	35
Florida Wkly Times	39
Fulweiler, P. C.	33
Giddings, A.	34
Goldman, M.	39
Good & Reese	39
Goode, John & Co.	39
Gregory, Jas. J. H.	37
Griffith, Jas.	38
Griffith, N. S.	33
Grovinge, Henry	32
Gurney Heater Co.	36
Hales, H. H.	32
Halliday, R. L.	32
Hallock, V. H. & Son.	31
Halsey, Wm. F.	32
Hammond & Hunter	37
Hammond, Benj.	39
Hancock, Geo.	34
Hartson & Son	39
Harold, Thos. H.	35
Herr, Albert M.	35
Hieble, Ad.	33
Higley, Henry G.	35
Hinger Bros.	39
Hillebrand & Breimeier	32
Hillebrand, Wm.	39
Hippar, E.	32
Hitchings & Co.	37
Holmberg & Noel	33
Hocker, H. M.	33
Humphrey, C. B.	34
Hurff, Freeman	39

**OLIVES IN DEMAND.**—Considerable discussion has lately arisen among California horticulturists as to the value of well-rooted olive cuttings. The demand for olive cuttings far exceeds the supply, and prices range from \$100 to \$350 a thousand.

## SOMETHING NEW

— IN —

## Heating Apparatus

— FOR —

## GREENHOUSES.

Send for Illustrated Catalogue.

J. D. CARMODY,  
EVANSVILLE, IND.

## PIPE AND FITTINGS FURNISHED

— TO —

## PLANS AND SPECIFICATIONS.

Contracts solicited for

## HEATING GREENHOUSES.

Most improved plans.

## ALL WORK GUARANTEED.

Prices furnished on application.

E. A. STIMSON &amp; CO.,

No. 22 and 24 Sears Street,

DAYTON, OHIO.



Sectional View.



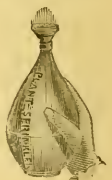
## Scollay's Valvular Plant Sprinkler.

ALSO THE IMPROVED PUTTY BULB,  
FOR GLAZING GREENHOUSES, ETC.

None sold at retail. Buy from your Seedsman.

PATENT HOT WATER BOILERS,  
For Greenhouses, Poultry Houses, Etc., Etc.

JOHN A. SCOLLAY,  
74 and 76 Myrtle Ave., Brooklyn, N. Y.



## Improved Hot Water Boilers

For Heating

Greenhouses, Graperies,  
CONSERVATORIES, ETC.

ALSO

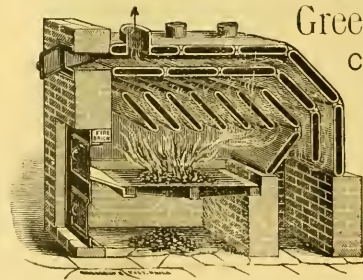
Cast Iron Pipe, Fittings, Valves and  
all Material for Heating by  
Hot Water.

Send for Catalogue.

MYERS &amp; CO.

1173 So. 9th St.,

PHILADELPHIA.



EXETER MACHINE WORKS

THE CELEBRATED  
WILKS WATER HEATER!

For Heating

GREENHOUSES,

DWELLINGS,

POULTRY HOUSES,

STORES, BATH TUBS.

ETC., ETC.

Send for Price List.

S. Wilks Mfg. Co.,

Cor. Monroe &amp; Clinton Sts., Chicago



111 SIZES OF SINGLE AND DOUBLE THICK

## GLASS FOR GREENHOUSES.

ALL GLAZERS' SUPPLIES.

Write for Latest Prices.

# THE AMERICAN FLORIST



America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. III.

CHICAGO AND NEW YORK, MARCH 1, 1888.

No. 62.

## THE AMERICAN FLORIST

Copyright, 1887, by American Florist Company.  
Entered as Second-class Mail matter.

Published on the 1st and 15th of each month by

THE AMERICAN FLORIST COMPANY.

GENERAL OFFICES, 54 La Salle Street, Chicago.

EASTERN OFFICE,

Room 31, Vanderbilt Building, New York.

All communications should be addressed to the  
general office at Chicago.

SOCIETY OF AMERICAN FLORISTS.—E. G. Hill, Richmond, Ind., president; John N. May, Summit, N. J., vice-president; M. A. Hunt, Terre Haute, Ind., treasurer; Wm. J. Stewart, 67 Bromfield street, Boston, Mass., secretary. The fourth annual meeting at New York, Aug. 17, 18, 19, 1885.

JUDGE C. C. COLE of Des Moines, Ia., has been unanimously requested by the executive committee to respond on behalf of the society when welcomed at New York in August.

THE SEASON FOR HAIL STORMS is at hand. The Florists' Hail Association, after months of hard labor, was organized on June 1, 1887. It has been in practical operation since that time. The directors desire the co-operation of every person who believes in hail insurance, and hope they will join without delay. Constitution and by-laws, with blank applications, together with all information desired, can be had by addressing John G. Esler, secretary, Saddle River, N. J.

### Lower Postage on Seeds and Bulbs.

Peter Henderson, of New York, Herbert Myrick, of Springfield, Mass., and James Vick, of Rochester, N. Y., appeared before Representatives Enloe, Anderson and Allen, a sub-committee of the House Postoffice Committee, yesterday, and argued in favor of the passage of a bill decreasing the postage on seeds, bulbs, cuttings, roots, plants, etc. There are three bills before the committee, two introduced by Representatives Baker and Conger, fixing the rate at eight cents a pound, or one-half the present figure, and the third by Representative Grout, reducing the postage to four cents a pound. It was the latter bill that the seedsmen favored. Mr. Vick, who made the principal speech, argued that the reduction would bring about a revenue to the government, as packages which are now sent by express would go in the mail; that the people would be benefitted because the amount of postage is always added by the dealer to the price of the article furnished, and lastly, that the seedsmen would feel a benefit in the increased bulk of trade.—*Washington D. C., Post, Feb. 1.*

### The New York Orchid Show.

We should begin to look on a Lenten orchid show as a regular event, though the exhibition we now have to chronicle is only the second of its kind. It had one serious drawback to contend with in the extreme rigor of the weather; this prevented the transportation of plants from a distance. The largest proportion of plants came from Rose Hill nurseries, though there were many fine cut flowers from other exhibitors. The rule of compensation for flowers and plants loaned was the same as at the first show; each exhibitor was given full credit for his stuff, and was allowed the market value of his flowers, whether cut or on the plants.

But in spite of the cold weather there was no diminution in the interest of the show. It opened on the 16th with a private view, during which the plants were admired by a good many prominent people while Erdeleji Naczi's unpronounceable Hungarian band discoursed sweet music, including a new "Orchid Show March," composed for the occasion.

A batch of cocoa-nut palms from Siebrecht & Wadley's nursery at D'Abadie, Trinidad, attracted a good deal of attention. They were laden with fruit, and all they needed to complete the charm was Mr. Siebrecht's pet monkey, Jack, who now languishes in the seclusion of New Rochelle. Some of these palms formed the doorway in the entrance hall, where the centre group of Japanese jugglers were surrounded by cacti, tilandsias, agaves, aroids and palms. The passageway between this hall and the winter garden, where the main exhibit was held, was massed with cape smilax and ivy, with nepenthes in the archway.

The chief exhibitors, apart from the managers of the show, were Messrs. Erastus Corning of Albany, William Matthews of Utica, J. R. Pitcher of Short Hills, Wm. Brown of Flatbush, R. M. Pratt of Watertown, W. C. Wilson of Astoria, G. A. Backus of Newtown, J. G. Esler of Saddle River, B. A. Brackenridge of Govanstown, Md., and W. A. Manda of Cambridge, Mass.

The general arrangement of the hall consisted of two large centre stands and a bank down each side. The charming grotto which filled the 24th street entrance last year was vetoed by the Fire Commissioners or some such power, so its place is taken by groups of palms and a big sagu, with an effective background of red drapery. As one might expect, the grouping is very tasteful. All the "wax fingers" have been removed from the winter garden, which is in itself a vast improvement—Linnaeus and Mrs. Jarley do not always harmonize—and the alcoves which held groups make most charming little recesses when filled with plants.

The orchids must have first place. The display of cattleyas was most interesting, especially in the many varieties of trianae, the pure white form was to be seen from several exhibitors in varying degrees of excellence. Siebrecht & Wadley's C. trianae aspasia was a beauty. There were altogether about twenty varieties of trianae; bogotensis, carmingii, and splendidissima very good.

Two of the "stars" of the show were from Mr. Corning's collection; they were Cypripedium Morganianum and Lælia bella. This cypripedium is a cross between superbiens and Stonei; it is a large flower, having a dorsal sepal, light colored, shaded with red, the broad petals yellowish, blotched and spotted with dull purplish maroon; the lip long, shading from dull brown-purple to greenish white. It is a beautiful thing, though it hardly attracts as much notice from non-professionals as the adjacent Lælia bella. This is a cross between L. purpurata and Cattleya labiata, and it partakes most strongly of the character of the latter parent. The flower is large, petals and sepals lilac; the lip rich purple with a wonderful velvety texture. It is assuredly the queen of all lælias; a column of adjectives would scarcely do it justice.

Another interesting thing in Mr. Corning's group was a big spike of Vanda gigantea, the most imposing of its family, with its warm yellow color and massive growth. The same exhibitor showed some handsome specimens of the red varieties of Lycaste Skinnerii; they were very rich in coloring.

Mr. Kimball's collection was both large and interesting, though, like that of Mr. Corning, it consisted solely of cut flowers. There was a white Cattleya trianae amongst them—a good one too—and a trianae grandis of great beauty. Some good cypripediums, especially Boxallii and purpuratum; Odontoglossum Inseleyi, grande, and hebraicum, which are flowering rather early; very fine Cymbidium eburneum grandiflorum, and a queer Cataseum gnomo, which looked like a botanical joke. There were so many meritorious exhibits that it is impossible to give them all recognition without taking up too much space.

W. C. Wilson showed a little group with a mingling of ferns, palms and orchids. Near by was a charming alcove filled with Mr. Matthews' plants, among them a fine cælogyne, phalaenopsis and lycastes, as well as a Vanda cerulea which received the distinguished consideration we always feel for a blue orchid. The well-arranged group from the Brackenridge nurseries at Govanstown, showed among other good things, a very beautiful plant of white Lycaste Skinnerii; it was startlingly pure in color.

Mr. Manda showed some fine cypripediums and other cut orchids. In the



display from R. M. Pratt, Watertown, Mass., there were some beautiful spikes of *Dendrobium Wardianum* Lowii, and some fine anthuriums, in addition to the orchids.

Mr. Pitcher's plants, arranged in the little recess which usually displays a Moorish interior, made one of the prettiest groups in the show. There was a graceful background of papyrus and other green, throwing out some fine phalaenopsis, lycastes, cattleyas, anthuriums, etc. It was really charming. Near it was a fine large-flowered *Odontoglossum grande* from J. G. Esler. Mr. Brown's plants were in another pretty alcove, and were also of much merit. Mr. Backus showed some cut orchids, and also a fine new *Amaryllis*, "Newtown's Pride," which is expected to be an acquisition to the cut flower trade.

It would require an entire article to enumerate the plants and flowers exhibited by Siebrecht & Wadley. Among the many cattleyas there was a fine white trianae; *C. Schroederiana*, a distinct and uncommon variety, which Williams supposes to be a summer bloomer; *C. Percivaliana*, and *C. amethystoglossa*. The many varieties of trianae take the lead. *Catasetum tridentatum*, nicknamed *Pilgrim's Boat*, was an attractive oddity. There was a fine representative of *Cymbidium Lowii*, and *C. eburneum giganteum*; *cyrtopediums*, *dendrobiums*, *epidendrums* and *lalias* were well represented. There were thirty varieties of *odontogloss*; *O. Insleyi* *leopardinum* was a beauty, and there were many fine forms of *Alexandrae*. Among *oncidiums*, *Cavendishianum* and *sarcodes* were specially noticeable; the former was of marked vigor. There was a long list of *phalaenopsis* and showy *dendrobies*.

Apart from the orchids a special attraction was the Rose Hill strain of cyclamens, which were exhibited in great variety. They vary from stainless white to rich crimson, and are of unusual size and substance, with finely marked foliage; a vast improvement on the old sorts. This foliage contrasts very effectively with orchids, and should be of value in decorating.

A case at one end of the hall contained *bertolonias*, *fittonias*, *cephalotus*, and other stove foliage plants. Some nepenthes were there to supply the popular demand for "flesh-eating" plants, and the fruit of *Caryota urens*, hanging upon a sago, was regarded with respect. A "double" calla from Mr. Barlow was an oddity, though it was not truly double. It had two spathes, growing opposite on the same stem; one, though otherwise perfect, contained no flower, and may be considered really an arrested leaf growth.

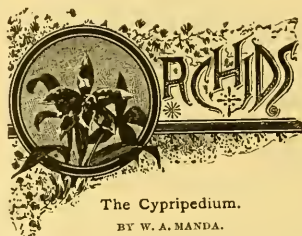
Large palms, draped in Florida moss and hung with epiphytes, contributed to the picturesqueness of this show, and it may be impartially pronounced a very handsome one. The busy managers have scored a second success, and we all hope they may repeat it again next year.

EMILY LOUISE TAPLIN.

#### An Avenue Lined with Orchids.

The picture represents the main avenue in Eden, Musee, as it was arranged during the orchid exhibition of Messrs. Siebrecht & Wadley. The two banks were divided by this avenue, and there were paths on the other sides. The hall has never been laid out with such fine effect, or so conveniently for visitors. At the rear of the banks the foliage rose very

high, the half-bleached leaves of the cocoanut trees contrasting handsomely with the lively polished green of growing palms. Orchid plants were suspended from tropical foliage specimens, and very gracefully the banks were graded from waving palms down to where the cut flower orchids were shown in groups among ferns, asparagus and lycopodiums. The banks were finished at the entrance end with *Seaforthia elegans*, and on one side there was a specimen *azalea* in full flower.



The *Cyrtopedium*.

BY W. A. MANDA.

X.

All lovers of this genus will be pleased to know that Mr. Pitcher's extensive collection remained intact after the fire on the 28th January, which destroyed several houses with the plants they contained. Fortunately, the range of houses containing these, Mr. Pitcher's most favorite plants, were unharmed. Those houses were built last summer near the elegant mansion, and are filled with plants representing about 180 species, varieties and hybrids of *Lady slippers*, many being extra large specimens of great value. This collection, although only about a year old, has grown up wonderfully for its time of existence. Mr. Pitcher, who is an enthusiastic lover of plants, has never let an opportunity pass to acquire any rare or valuable specimen that was for sale either in this country or Europe. This collection, that of Mr. Kimball and Mr. Corning, are the largest in this country.

A few weeks ago I had the pleasure of visiting Mr. Pitcher, and at that time there were many fine *cyrtopediums* in bloom, among others a large variety of the beautiful *C. Spicerianum*, some large plants of which had a great number of flowers. *C. insigne* was well represented by several fine varieties, such as *C. insigne* var. *Chantini*, *C. insigne* var. *Maulei*, *C. insigne* var. *Forstermannii*, and others of similar merit. The ever-blooming *C. Harrisianum* was well bloomed and in some extra fine varieties, among which were noticed the striking form called *C. H. marmorata*, the whole flower of which is mottled with green and purple. *C. selligerum majus* and *C. Haynaldianum* had fine spikes with several flowers. *Selenipedium Seleni*, *S. Roelzi* and *S. longifolium* peeped out of several corners. The strange *C. Tonsum* and the beautiful *C. Godefroya*, the chaste *C. niveum*, together with masses of the old *C. venustum*, and a very fine variety of *C. barbatum* were worth notice, also the finely spotted *C. Argus* var. *Moensei*. The rare *C. tessellatum* porphyreum was pushing up a flower, and a host of others that bloom at this season of the year, together with a few that had come out of their usual time. Beside the plants there are about sixty pots sown with *cyrtiped* seed and any quantity of seed pods in different stages, promising good results.

#### PLANTS IN FLOWER.

*Cyrtopedium Harrisianum*, Reich. f. *C. barbatum* x. *C. villosum*.—Roots thick, downy; leaves eight to nine inches long by one and a half broad, green, irregularly tessellated with darker lines, the base is beset with dark spots; scape is seven inches long, purple, hairy; bract is one and a quarter inches long, green, with purplish markings; ovary is one and three-quarters inches long, somewhat triangular, thick and grooved, purple; dorsal sepal somewhat reflexed, two and one-quarter inches long by one and three-quarters broad, dark purple on a green ground, with a white margin along the edge; lower sepal only one and a half inches long and three-quarters broad, of a uniform light green color; petals two and a half inches long and nearly one broad, somewhat incurved, green with purple shade and dark purple veins, hairy at the edges; lip two and a half inches long and one and a quarter broad, green with purple shading and veins; staminode green with slight mottling, horse-hoof shaped. The whole flower shiny, as if varnished.

This was the first hybrid *cyrtiped* obtained by Mr. Dornay for Messrs. Veitch & Son, and still it is the finest and one of the most useful of all the *cyrtipeds*, being a free flowerer and rapid grower. It generally blooms twice a year, and often twin flowers are produced on one scape. This hybrid has also served as parent to several of the new and beautiful hybrids, such as *C. crenatum*, *C. Williamsianum*, *C. Thibautianum* and others. Fibrous peat, potsherds and sphagnum is the material they seem to delight in, and an average temperature of 60° is most suitable. This variety cannot be too much recommended to the beginner as well as to the commercial florist.

*Cyrtopedium venustum*, Wall. var. *spectabile* Hort. Sylhet.—Roots as in type; leaves thicker, over two inches broad, with finer and richer mottling than in the type; scape and bract as in type; ovary broader and flatter at the back; dorsal sepal larger, with lighter and more prominent veins; the lower sepal as in type; petals broader, of a richer yellow hue and more profusely spotted, remarkably deflexed backward; lip flatter, brighter shiny yellow color; staminode as in type.

This beautiful variety is rather rare, there being many of this type under this name. It is easily distinguished by the broad leaves, the bright-colored flowers and the backward bent petals. It requires the same treatment as the type, described on page 272 of the *FLORIST*. When well grown, this makes a most striking plant, whether in flower or not.

Botanic Gardens, Cambridge, Mass.

#### Buying Orchids.

I was much interested in an article by Mr. B. Grey, which was read before the Florists' Club at Boston Jan. 3, and appeared in the *FLORIST* of Jan. 15. I think it the most practical and to the point article I have seen on the subject. I would very much like to have Mr. Grey go a little farther and tell us the reason so many who invest in orchids have so little success. I am sorry I am not acquainted with Mr. Grey, but suppose he is a grower of orchids for sale. If I am right in my supposition, no doubt he has had many would-be orchid growers call at his place, and seeing some fine things in bloom, they will inquire the price.





THE ORCHID SHOW AT NEW YORK

Mr. Grey will give them what he considers a fair price; most likely, as a business man, he will charge as the colored cobbler did for repairing the boots—so much for the repairs and so much for knowing how to do it. I think this quite right. The doctor and the lawyer will do the same, as it cost them considerable to know how.

Mr. Grey's customer does not pay the \$5 or \$50, as the case may be—"Will call again." At the same time Mr. Grey's prospective customer has in his pocket a circular from Catchem & Smart, "auctioneers of new and rare plants," giving dates for "sales of large consignments of orchids in a state of nature," or something to that effect. Mr. G.'s prospective customer, if he is in a position to have orchids and other luxuries, can make it convenient to be on hand about the time of the sale. Most likely he will be anxious to see the gems offered, and will get there early, ready to bid often. If he gets there an hour before the sale commences, he will most likely find from six to ten others there, like himself, too smart to be victimized by a practical, reliable orchid grower, but go right to the fountain head, and are supplied at first cost. "No one shall swindle them." If he is not too full of his own shrewdness to attend to other matters, he will most likely see six or eight everyday-looking

men apparently killing time and taking no interest in the surroundings. Mr. Grey might be one of these everyday-looking men, who are taking in the whole thing at a glance, and if anything on the list is good enough for them, they have some one on hand to bid for it, and most likely when it is knocked down Mr. Grey's prospective customer will say to his friend: "See the trash that greenhorn is paying for!" At the same time Mr. Grey or one of the six in question knows what he is buying, what condition it is in, and also how to handle it so that in one, two, three or five years he is able to offer it to his real customer with the satisfaction of knowing it will be a success. Most likely Mr. Grey's prospective customer buys largely, as "a lot of real gems" are offered—"many unnamed sorts," which is supposed to be a guarantee of their newness and novelty.

If the would-be orchid grower should happen to be a young florist with more ambition than common sense, it will be amusing to call on him two weeks later and look over his investment. You most likely find orchids you know but little about and care less. They will most likely have a snug corner fixed up for their accession, and will be potted in every imaginable material, from rotten wood to old boot-legs. Call around again in six or twelve months; you will prob-

ably find the snug corner vacant, and hear that orchids are a fraud, and that there is no money in them, and the ambitious young florist turning his attention to big pansies. Should Mr. Grey's prospective customer be a man of means and going into orchids as an amateur, his experience with the auction mart will be about the same as the ambitious florist's, and twelve months later Mr. Grey will not be able to sell him his best specimen orchid if he offers it to him for 50 cents, as he will say he is disgusted with orchids. Should either of Mr. Grey's visitors have been genuine customers to the extent of a \$5 or \$10 plant, Mr. Grey, as a business man and a lover of orchids, would willingly have given hints on the treatment of plants, and the result would have been satisfactory all round.

I have been a grower of orchids in a small way for a great many years, and if I have not made money out of them, I have had a great deal of satisfaction. I receive a great many orders for baskets and cut flowers—something very choice and rare—which if I got I could not fill without orchids; as I can fill such orders, I can get my price for them. The value of orchids is not understood by outsiders; often a plant at \$50 is much cheaper than another plant of the same variety at 50 cents.

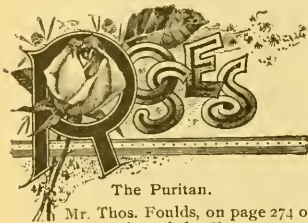
Inclosed please find a photograph of a



Cattleya Skinnerii; many other varieties I have equally good, some of which require about as much attention as a geranium of the same size. S. TAPLIN.

Detroit, Mich.

[The photograph shows a plant covered thickly with flowers; should judge there were at least 100 blooms.—ED.]



Mr. Thos. Foulds, on page 274 of the Feb. 1 number of the FLORIST says about this rose: "It is a good rose and will make many friends." Now with due respect for your opinion Mr. Foulds, I for one sincerely differ with you. My opinion is that the Puritan is not a good rose, and that hereafter it will make no friends; my opinion is in fact, that no person having any knowledge of what constitutes a good or useful rose will ever grow it after they pull out those already planted. And further, I believe it to be to all intents and purposes absolutely dead. When my eye happens to catch a glimpse of the ghastly products of my plants, consisting of sickly, greenish white, bilious, cabbage-looking so-called flowers, I am thoroughly convinced that it never ought to have lived.

During the brief advertising career that this rose enjoyed we were directed in glowing terms to the keeping qualities of its flowers; there is no doubt that everybody who bought and planted it were thoroughly satisfied on that score long ago. I was recently in the store of one of the New York wholesale flower dealers, when my attention was directed to quite a jar full of cabbage-looking monstrosities said to be the flowers of this rose. Upon asking the dealer if he "sold those things," he replied with a contemptuous sneer: "Sell them! We can't give them away"—which spoke volumes for the keeping qualities of this rose. Oh yes! it will keep, like anything that will not sell. I believe that any attempt to boom up this rose will meet with failure, and that instead of being better the second year like the American Beauty as Mr. Foulds says, there will be none of it left by that time.

Paterson, N. J.

H. E. CHITTY.

[The FLORIST especially invites a relation of experience with any new rose or plant which our readers have tried, and desires a thorough ventilation of all defects as well as virtues possessed by such. Hence we as readily give space to the above severe scoring of this rose as we have to any recommendation of it. The positive value of this rose as a profitable one to grow for cut bloom has not yet been demonstrated, but for the benefit of our correspondent and readers generally we will say that remarkably handsome and perfect flowers of this rose can be produced, as we have personally inspected a quantity of magnificent blooms on several occasions.

As above stated the problem as to its desirability as a cut flower rose has certainly not been definitely solved, but bearing in mind our experience with La France, Am. Beauty and Sunset it would seem unwise to wholly condemn it with-

out at least a three years trial. If it can be grown in quantity as cheaply even as Am. Beauty and in as good form as were a sample two dozen blooms we inspected it will be well worth retaining. Let us not go to either extreme.—ED.]

#### The Rose Grub.

In answer to Mr. Peter Henderson in last number, I would say, first: That the destruction of the bugs puts an end to the increase of the "grub" is beyond doubt. Also, that the chickens did not cease their warfare on the "grubs" after the expulsion of the bug. The plants bore undiminished evidence of the "grub" being on the roots. Now, as to the chickens getting at the "grub." Some time previous to the placing of the chickens in the rose-houses, the rose benches were treated to a liberal topdressing of manure; by removing a portion of the manure by hand, I found several "grubs" on the surface of the soil,



MARKET PLANTS

1. Geranium as it should not be grown, but frequently is.
2. Geranium as it should be grown, but too rarely is.

and directly under the manure. This proved to me that the "grub" will come to the surface, probably in search of food or from some other cause, thus coming within the reach of the chickens. The roses did not have their roots laid bare to their extreme points; nor did I sustain the loss of a single plant through the chickens. The bug and the "grub" were bounced over a year ago, and have not since returned. The chickens have the credit and shall continue to have it until I am convinced to the contrary.

R. B.

#### Bull-Head Perles.

While the subject of bozzle-headed Perles is agitating the growers, it is refreshing to find a batch free from them. I saw 500 plants at Marvin & Nagle's of Wilkes Barre, Pa., that were simply grand. The plants were one mass of young growths solid with bloom, and the closest scrutiny failed to find what is now the bugbear of our old favorite. They attribute their success to a chemical manure they are using, and certainly the appearance of their roses and other plants justifies their belief. Everything on their

place is in the best possible health and vigor, and a batch of Liliun Harrisii, many of them with twelve blooms showing, is a treat to see. This young firm is doing good work in Wilkes Barre and has been successful from the start. F. G.

#### Budded Perles.

The "noted rose grower of Boston" referred to by Mr. Whittle on page 274 of the AM. FLORIST, wishes to say to Mr. W. and to the readers of the FLORIST that he does not believe in trade secrets, and that there is no mystery regarding the stock on which he has been budding his Perles. The stock referred to is the "Yellow Banksia." PETER BALL, Malden, Mass.

PROPAGATING.—It is now in order to propagate roses for planting on the benches next fall. Grow only such varieties as appear to do best with you; every grower does not find the same rose profitable; locality has something to do with this, and it is always a mistake to keep on growing anything that does not yield as satisfactory results as could possibly be obtained from the same space, differently occupied. Keep the young stock growing and all buds picked off; when they have formed good plants, 4-inch pots, they will be ready for the bench; the size of pot, however, is not so important as the vigor of the plant. I have seen plants in 2½-inch pots vastly better stock for planting than many of the roses planted from 4-inch pots.

A. W. M.

BEND, NOT "BUD."—In last issue a typographical error in the ninth line from top of column on page 301 made Mr. May say "bud all strong shoots over and tie down," instead of "bend" all strong shoots, etc.

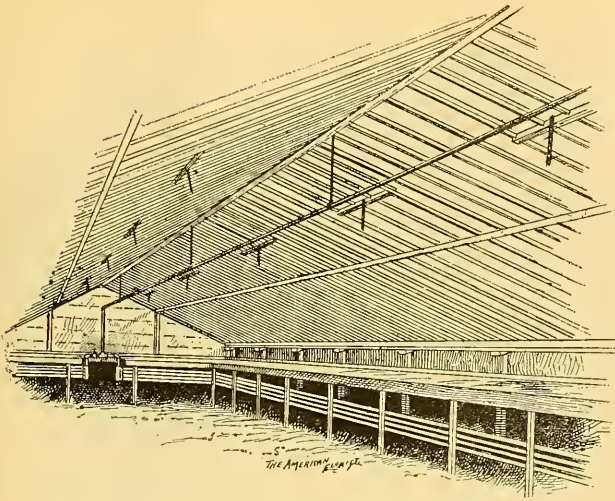
#### A Memorial to Francois Lacharme.

Committees of French rosarians and horticulturists have been organized for the purpose of erecting a memorial at the grave of this noted rosarian, and a circular issued asking for subscriptions to defray the expense. Subscriptions may be sent to Pierre Cochet, a Grisy-Suisses (Seine-et-Marne,) Paris; or A. Bernaix, 63 Cours La Fayette, a Villeurbanne, Lyons, France. The circular states that the names of the subscribers will be published in the *Journal des Roses* and the *Lyon Horticole*.

#### Market Plants.

In the sale of plants at the public markets as is common in most cities, it is well understood that to sell readily the plants must present the best possible appearance and be well covered with bloom; and in the continual effort to get them into the best selling condition, the results upon the after life of the plant is frequently entirely overlooked. This is not conducive to lasting success, as no transaction tends to benefit trade which does not give after satisfaction to the purchaser.

The average market plant is a snare and a delusion; a thing of beauty only about as long as it takes the purchaser to carry it home. This does not pay in the long run. Don't depend on new customers every year. Grow good stocky plants which will give good after results to purchasers. They will soon find that your plants are the best and your trade will



STEAM HEATING AND OVERHEAD RADIATION.

increase accordingly. It pays to sell honest goods, and they cost no more to grow than the long-drawn-out, bloodless trash so commonly seen in our city markets.

The increased sun at this time is starting plants into growth. Don't let a single plant become "drawn" through crowding. As quick as you are crowded get all such things as geraniums, fever-fews, cupheas, alyssums, etc. potted up and placed out in hot-beds. They will do far better there and give you room to work in the houses. If you have not got sash enough now to do so, get them at once; they will pay you well. The manure from the spent hot-beds afterwards will be worth all the trouble and expense of procuring the fresh material for the beds. After the middle of this month such plants as heliotropes, alternantheras, etc. may with safety be plunged in hotbeds in the latitude of Chicago. If you grow market and bedding plants you should have a frame yard containing almost as much glass as there is on your houses. To be sure the frames need careful attention, but they pay every time when used as described. Have board shutters or straw mats to cover the beds at night for some time yet. The plants named and many others make a better, "stockier" growth in the frames than in the greenhouse and make plants which give far better after results.

As the time for marketing your plants come on, take batches into the greenhouse as wanted, where a short time will bring them into handsome bloom—more attractive than drawn specimens. You have laid a foundation which can be destroyed only by crowding together again in a high temperature for some time. Aim for high quality as well as a large quantity and by above method you will secure both if care is exercised, and without the last named essential you will obtain neither. A description of the frame yard at Lincoln Park, Chicago, where most of the bedding plants are

grown in frames after the middle of this month, will be found on page 62 No. 51 of the FLORIST. Read it if you are interested. Also note "daily record of work done" at this park in another column.

#### Steam Heating and Overhead Radiation.

Judging from the tenor of the communications which so frequently appear in the pages of the FLORIST, the inference might be drawn that effectual and economical heating was one of the most important and at the same time most perplexing problems connected with the successful growing of plants under glass.

If the boiler is illly constructed or not properly located, and the pipes placed in position without regard to natural laws, the result will be disappointment and failure to accomplish the object intended; then begins a series of alterations and changes to overcome obstacles, until the whole structure becomes a constant source of apprehension and annoyance, while a little thought and study in advance of the work would have obviated all difficulties and saved a large amount of expense and labor.

In building my present houses, intending to heat with steam, I arranged the heating apparatus upon a principle which I believed to be the nearest approach to the natural laws governing steam, and now, after more than two years' successful operation, the plan adopted has proven so satisfactory to me that for the benefit of the readers of the FLORIST I shall endeavor to give a description of that plan and my experience with steam heating.

In the arrangement of the heating surface, a 2½-inch pipe connecting with the boiler is carried up perpendicularly into the storeroom above. At a point opposite the center of each house a 1½-inch pipe connects with the supply pipe, and suspended from the ridge-pole, is carried to the opposite end of the house, where it drops down to the front edge of the end

table, and branches each side connecting with four 1-inch pipes, which are carried across to and under the front edge of the side benches back to the south end of the house (as shown in the accompanying sketch), where they are connected with a 1¼-inch pipe leading into a ½-inch return, placed directly under this point and below the water line of the boiler, virtually doing away with return pipes altogether.

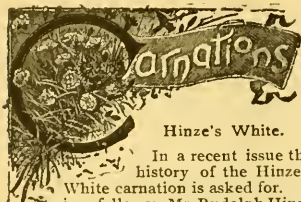
The arrangement in all the houses is about the same, with the exception of one, where the leading pipe is suspended from the purlin over the north edge, and the lower pipes carried back on the sides of the raised border. Steam cocks are attached to the ends of the three upper pipes of the side ranges, by which means they can be cut off and the houses run with one, two, three or four pipes on each side, as the state of the weather may require. Air cocks are placed at points directly over the return pipe, and the steam gauge is hung on the west wall of the work shed, that the condition of the fire may be noticed without going into the cellar.

Among the advantages gained by this system are, first, elevation. Plant structures necessarily cover a more or less extended area of flat surface, and where all the pipes are carried below the benches, whether the house is fifty feet or two hundred feet long, both the flow and return pipes must be placed in this limited space of not more than three or four feet elevation, leaving but little fall to carry the condensed steam in the form of water back to the boiler and overcome the friction incidental to its passage. This cannot be satisfactorily overcome by the force of the steam. If there is any one thing at which steam rebels it is to be forced into a cold, soggy pipe, and it is only by increasing the pressure that the circulation can be carried through the pipes; even then it often happens that a part of the pipes become heated, while others remain cold and torpid, and only after the steam has slowly eaten its way through does the circulation become perfect. Carrying the supply pipe at once to the highest point attainable, gives room for all the fall required; the pipes are thoroughly drained, and when the steam is started it circulates freely with but little pressure, and every portion of the radiating surface is easily and quickly heated. Again, a more uniform temperature is preserved throughout the house. This upper radiation also counteracts the influence of the colder air before it descends from the glass and comes in contact with the plants.

Further, after more than two years' close observation and careful study, I have arrived at the conclusion that the solar rays passing through the radiation from this upper pipe are intensified to such an extent as to nearly approach those from a summer sun, and impart increased vigor to the plants coming within their range. In my study of the subject I have had abundant proofs to bear me out in my conclusions. One among them, and which first attracted my attention to this influence, was the prolific and persistent blooming of my chrysanthemums, two year ago, from November till May. If upon further investigation it shall be proven that I am correct in my theory, there can be no question as to the great advantage gained by this system of heating, whether applied to steam or hot water.

St. Joseph, Mo. D. M. REICHARD.





Hinze's White.

In a recent issue the history of the Hinze's White carnation is asked for. It is as follows: Mr. Rudolph Hinze of Detroit, imported from Germany in the winter of 1877 an assortment of ever-blooming pinks, which he planted outside, and which, during the summer and fall of 1878, produced quantities of magnificent bloom. Thinking that they would be sufficiently hardy to withstand our winter they were left out and most all were winter-killed; the next fall Mr. Hinze collected the seed and planted with the view of obtaining some home-grown stock better able to withstand our climate, and among the seedlings appeared one which gave great promise of a useful future, yielding sixty blossoms, besides furnishing the neighboring gardeners with all the cuttings they required or desired. The carnation was named after its producer by Mr. John Breitmeyer of Detroit, who was the first to place it in a catalogue.

I have heard unfavorable opinions of this variety of carnation, but I am firmly of the opinion that it is simply because the party making it had been deceived, and had not the true Hinze. I have in my travels seen many so-called Hinze's White that would have made Mr. Hinze blush with shame. A well grown plant should produce flowers from two and a half to three inches in diameter, and (if left long enough on the plant) as white as snow. The flowers open quite a dark shaded yellowish pink, but gradually become white, and may be allowed to remain on the plant safely two weeks.

I have handled Mr. Hinze's flowers for years, and certainly consider his white carnation on general principles the best ever produced.

Detroit, Mich.

JAMES VERNOR.

**PROPAGATING.**—If the necessary stock of carnations for next season has not been already propagated, it is certainly high time to give the matter attention, but it should properly have been done two months ago. There is nothing gained by late propagating; on the contrary, it is an evil, resulting in weak, unhealthy stock. Keep the young plants in a cold frame or pit, fumigate sufficiently to keep down green fly, and just as soon as possible in spring, plant out in the open ground.

A. W. M.

**NEW CARNATIONS.**—Mr. Charles T. Starr, Avondale, Pa., sends us blooms of carnations "American Florist" and "Erminie." The first is a very striking flower spashed with carmine on a salmon ground. In the present demand for fancy varieties this should meet with favor. Erminie is a beautiful shade of pink, very full, well formed and delightfully fragrant. A flower of Anna Webb, deep scarlet with deeply fringed petals, was also enclosed.

**CARNATION SNOWBALL.**—Specimen blooms of this white carnation are sent us by John Breitmeyer & Sons, Detroit, Mich. They were certainly magnificent blooms, large, full, fragrant, good color, and with solid calyx. A few very large blooms of the old reliable Garfield were



CHRYSANthemum EDWIN MOLYNEUX (3-4 NATURAL SIZE)

also enclosed. This is the standard red carnation around Chicago as well as Detroit, and it would have to be an extraordinary good carnation to supersede it with growers here.

#### The Violet Disease.

**EDITOR AM. FLORIST:**—I read with a great deal of interest the article in your issue of Jan. 15 on this subject, by H. T. Funnell. His theory is most rational, that the germ of this disease, like that of many other epidemics that is affecting animal as well as vegetable life; is wafted by the atmosphere probably to great distances. Still, I am yet inclined to the belief that the plant must have been feeble by a treatment foreign to its nature, before the germ could take root, such as continued winter forcing or other enfeebling causes.

It is just so in epidemics affecting the human family: when ship fever, small pox, cholera or yellow fever strikes a community, it does not take all. It is evident that the germ only gets a foothold on those whose systems are suitable to its growth. Just so in the violet and carnation diseases; these do not attack whole or particular sections of a country. The trouble comes in individual cases, often one kind being attacked and the same kind exempt within half a mile's distance. It is particularly noticeable that in the southern States, where no artificial heat is applied to violets, that as far as I know, they have thus far been exempt. I got a lot of Swauley White violets last November from Nashville, Tenn., where

I presume artificial heat is not needed, the like of which for vigor and health had never before been seen in this section, and as we do not force violets—only grow them in cold-frames for stock—I will be much surprised if under this treatment they should be affected with disease.

All who have had experience in growing roses know that varieties that are subject to mildew such as *Mermet*, *Jacqueminot*, etc., when exposed to violent changes of temperature, caused by being chilled by the door of the greenhouse being left open for a few minutes, when it is freezing outside, or by the ventilators being left open long enough to chill, that the portions of the rose house so struck becomes affected with mildew, the other portions of the house, where there has been no chill, being entirely exempt. This proves beyond question that the germs of the mildew are at all times ready to sow themselves, whenever you give them the suitable soil to do so, or in other words, the rose plant is shocked by the chill, its circulation stopped or impeded, and is thus placed in the condition demanded for the growth of the parasite, mildew.

If this be true in the case of mildew on the rose, (and what man of any experience can doubt it?) is it not fair to infer, reasoning from analogy that all parasitic germs, fungoid, or insect life, that attack the higher organisms of plants or animal life, do so to a greater degree if not exclusively, only when the vitality of such has been impaired?

PETER HENDERSON.

Jersey City, N. J.

Long Island Plant Notes by Wm. Falconer.

GEONOMAS and CHAMÆDOREAS are not only ornamental-leaved palms, but quite conspicuous as "flowering" plants.

MARANTA WARSCEWICZII, in bloom now, has showy white flowers and throws its scapes well up above its handsome rich foliage. But few of the other ornamental-leaved marantas have flowers worthy of notice.

CHRYSANTHEMUMS FROM SEED.—I sowed some seed in a flat Jan. 23, and to-day, Feb 2, have been pricking off the seedlings. I believe every seed germinated. These plants ought to make capital flowering stock, either for outside or indoors, next fall.

CHINESE PRIMROSES.—The specimen plants are growing fast. If you want seed, hand-fertilize the flowers. While it isn't worth while to keep over for another year single-flowered varieties, the choice doubles may be retained and propagated in the same way as we used to the common double white.

RHODOCHITON VOLUBILE in bloom now is a soft-wooded twining lophospermum-like vine from Mexico, with lovely showy dark plum-purple flowers in great profusion. From cuttings or seeds. Blooms freely out of doors in summer. No use as cut flowers.

ABUTILON INSIGNE.—Who has got it? I used to grow it. It is the finest of all abutilons for winter blooming. Flowers wide open, purple-crimson with dark crimson veins, borne in heavy terminal racemes.

ALOES are in their heyday in February and March. Aloe albo-cincta is, I think, the finest flowering species of all, and handsome too as a foliage plant. Aloe sulcata, A. incurva and A. angustata are also pretty flowering forms. But the "partridge-breasted" aloe, A. variegata, so common as a window plant, is the prettiest leaved of all, and too, when in bloom, quite a pretty flowering plant.

CYTISUS CANARIENSIS and its variety racemosus are in bloom, and lovely bright yellow little bushes they are. They make capital pot plants. Cuttings of the young wood root freely.

STREPTOCARPUS REXII and Tetranema Mexicana, two very pretty continuous blooming plants, scatter themselves about among the orchid pots and baskets with the same persistence as do ferns or Impatiens sultani.

STREPTOSOLEN JAMESONI.—My plants banked together in a greenhouse with a night temperature of 50°, are now displaying their gorgeous masses of orange and yellow flowers. Cuttings of the young wood strike as freely as do those of heliotropes, and those struck now can be grown on into capital blooming plants four to five feet high before this time next year. But old plants produce the heaviest bunches. I don't know how big a vine it becomes in its native country, but under cultivation it shows every tendency of becoming a heavy, far-reaching, woody vine, even more so than in Bougainvillea glabra. A sure bloomer and of the easiest possible cultivation.

LAPAGERIAS.—Have just repotted them. They like lots of root room, abundant clean drainage, and the roughest sort of compost. They now begin to throw up stout stems from the bottom and to break freely from the old wood. See that they are clean from scales, mealy bugs and thrips. In their growth don't let the



CHRYSANTHEMUM MR. H. CANNELL. (3-4 NATURAL SIZE.)

vines tangle and intertangle, but lead them out straight and orderly. And remember that lapagerias, like most other vines, if left to themselves, never run to the north or east, but always to the south and west, and govern your training accordingly. Also remember that slugs and snails just love the succulent shoots as they emerge from the ground, and that a collar of dry cotton wool won't hurt the shoots, but sadly disappoint the snails.

WM. WILSON says: Freesias should never be grown in pots. Big palms don't pay—they take up too much room; he never keeps a palm over three or at most four feet high. As a white rose, taking the year right through, there is more money in Niphetos than in any other. There is a future for American Beauty as an outdoor rose. As Asparagus plumosus is difficult to increase, it will always be high-priced. The spotted calceolarias are useless for the commercial florist. He doesn't care for double cinerarias, and doesn't grow them, but he grows a good many single-flowered ones. He likes to have his camellias come in at Easter. As propagators he would sooner have boys than men—their fingers are more nimble—but he would set a good man over them.

TERRE HAUTE, IND.—John G. Heipl is sojourning in Florida.

#### New Chrysanthemums.

Mr. H. Cannell is a handsome variety of a soft golden yellow color, in the style of Thunberg, and with florets curving rather more spirally than is shown in the wood-cut, which is otherwise a faithful representation.

Edwin Molyneux is a remarkably distinct and effective variety, with broad florets, slightly incurving at the tips, golden bronze on the lower surface, and an intensely rich crimson on the upper surface.—*Journal of Horticulture.*

#### The Verbena Rust.

Miss Taplin, in the Dec. 1 number of the FLORIST, asks: "What are we to do for rust on verbenas?" And then goes on and recommends "heat as something of a preventative." In our experience the only reliable remedy for this disease is to carefully watch the plants and throw out all infected ones as soon as they appear. We find that while an increase of heat will enable plants to outgrow the disease when not too far advanced, the disease germs remain with the plant for another season and the plant not having had its proper season of rest during the winter, it is weakened and poorly prepared to withstand the attack which is sure to come the following winter.

Our practice is to propagate in September from good vigorous stock which has



been trimmed back and invigorated by fertilizer about August 1st. Thus our young plants get a good start before the dark winter days set in; 40° is sufficient for the months of December, January and February. These plants are then shifted into 3-inch pots early in March, and plunged into hot-bed frames. The cuttings taken from these form our main crop of plants. Thus we have two sizes of plants both vigorous and healthy for the spring plant trade. We keep no verbenas in the greenhouses later than Sept. 1, the hot-bed treatment being much preferable. Our stock plants are planted out as early as we find the soil will work nicely, say about the middle of April. As a result of the above treatment we can say truly that the rust is conquered. Thus far we have thrown out but one plant and no traces of rust can be detected on our plants. We feel confident that if the above plan could invariably be followed by florists, the verberna rust would cease to worry us and verbenas would grow in popularity.

I wish to add that during the last summer the heat and drought encouraged the spread of red spider among our stock plants in the ground. This was effectually counteracted by daily syringing, taking care to thoroughly moisten the underside of the leaves.

Zanesville, O. E. L. KOETHEN.

#### Some Notes on Novelties.

BY WM. FALCONER.

**DIADDEM ASTER.**—In the crown asters the center is white and banded around with purple or crimson, but in the diadem aster the center is crimson and banded around with a narrow belt of white. Small flowers.

**TRIUMPH ASTER.**—Described as "the most beautiful and perfect of all dwarf asters." Flowers "pure scarlet, changing to satiny deep scarlet." Perhaps they are; I hope they are, anyway. But the imagination is mighty elastic. So far, I have never yet seen a *scarlet* aster of any sort, but we have crimsons in a plenty.

**AQUILEGIA FLABELLATA.**—A Japanese species of stocky, free-blooming nature. Flowers creamy white. By the way, why is it that our seedsmen and florists will persist in giving us the host of double and single mongrels instead of the glorious species? No yellow variety has ever been as pure and lovely as is *A. chrysanthus*; no blue variety better than *A. cerulea*, *A. glandulosa* (Grigor's) or *A. olympica*; white, better than *A. cerulea* alba, or red better than select *A. formosa* (true).

**SALVIA COCCINEA VAR. LACTEA.**—A white variety of a common old plant. As a variety it may be all right, but I should think that a white variety would be nearly as desirable as the old *coccinea* form. Tender perennials that bloom and ripen seed abundantly the first year.

**STATICE SUPERRA.**—An annual, from Turkistan. Forms tufts of sinuately cut and lobed foliage, and from the center of which arise several plumose spikes eighteen to twenty-four inches high of white to rose-colored flowers. Hardy statice, both annual and perennial, are a most undeservedly neglected race. Than *S. latifolia* we have few more desirable hardy perennials, and I have had *S. suworowii*, an annual, finer than I ever saw it illustrated.

**TRIDAX BICOLOR VAR. ROSEA.**—A new, very pretty, long lasting little annual from Chihuahua, Mexico. Amateurs only.

**ASCLEPIAS ATROSANGUINEA AUREA.**—A perennial from Bolivia, but as it blooms the first year from seed we may treat it as an annual. Seeds germinate readily. Flowers in large umbels, very showy, deep blood-red with yellow center.

**CAMPANULA ABIETINA.**—A new and pretty little perennial from Transylvania, with open-spreading, reddish purple flowers. Amateurs variety.

**ZINNIA LINIARIS.**—A pretty little yellow, single flowering species from Mexico. After the fashion of *E. Haageana*. Not a florist's desideratum.

**IMPATIENS HAWKERI.**—Seeds of this lovely plant were last year advertised in European and American catalogues. I tried hard to get some, but for love or money I couldn't get a seed in Europe or America. And now an honest Englishman, in his catalogue of this year, apologizes to his customers for having been deceived into offering it last year, and says: "It is stated that the plant is not known to have ripened any seed at present."

**CAMPANULA (Ostrowskia) MAGNIFICA.**—Max Leichtlin of Baden-Baden says this "is the finest hardy perennial introduced since the advent of the now well-known *Lilium auratum*." From Buchara. Tuberous rooted. Grows four to five feet high; leaves in whorls; inflorescence, terminal panicles of upright, well shaped flowers three inches long.

**SALVIA PRUNELLOIDES.**—From Jorullo, Mexico. An old plant re-introduced. Perennial, tuberous rooted, but blooms freely the first year from seed, hence may be treated as an annual. Grows some two feet high and produces flower spikes ten to twelve inches long, and blooms of a blue-purple shade.

**DIANTHUS PLUMARIUS SEMPERFLORENS.**—A new race of summer pinks obtained by M. A. Alegatiere of France through fertilizing our florists pinks with the perpetual carnations, thus giving to the new race a disposition to bloom in succession.

**GAILLARDIA HYBRIDA GRANDIFLORA.**—Very pretty, free and continuous-blooming plants. Identity almost lost, but probably a mixture between *Gaillardia aristata*, a perennial and *G. picta*, an annual. Treat them as annuals.

**PHACELIA PARRYI HYBRIDA.**—A hybrid between *P. Parryi* and *P. Whitlavia*, and said to be fine. For size, abundance and effect, the varieties of *Whitlavia* have not yet been superseded. *P. campanularia* which came out some years ago is the most brilliant of all, but miffy; and *P. Parryi* is neither as good, with me anyhow, as *Whitlavia* or *campanularia*. For amateurs only.

**DELPHINIUM ZALIL.**—Dr. Regel believes it to be *D. hybridum sulphurum*; and it may be *D. ochroleucum*, Meyer. A hardy perennial, blooms the first year from seed. Flowers large, sulphur yellow, showy, and produced on numerous spikes eight to sixteen inches long. Discovered and introduced to Europe by Dr. Atchison of the Afghan Boundary Commission. First raised by M. Max Leichtlin of Baden-Baden. Every lover of hardy plants should get it. Dr. Atchison wrote of it: "This plant forms a great portion of the herbage of rolling downs of the Badghis; in the vicinity of Gulran it was in great abundance, and when in blossom gave a wondrous golden hue to these pastures; in many localities in Khorassan—

about 3,000 feet altitude—it is equally common. \* \* \* The specific name adopted is that by which it is known in Afghanistan, but is probably Persian."

**DELPHINIUM GRANDIFLOREM BRECKII**—But why "*Breckii*"? According to the colored illustration in Breck's catalogue, it is just the same thing that we used to grow twenty years ago under the simple name of *D. grandiflorum* var. fl. pl. It is so recorded in Robinson's *Hardy Flowers*, 1872, and under the name of *D. Sinense* fl. pl. (*D. Sinense* is only a synonym of *D. grandiflorum*) by Sutherland in 1871. Nicholson not only mentions a double blue one but also a double white one. And I find seeds of *D. Sinense* fl. pl. advertised in some of this year's European catalogues. But be this as it may it is one of the very finest of hardy flowers, and worth growing by all. In clay lands *D. grandiflorum* acts better as an annual than as a perennial with me; but in sandy land it forms just as stable a perennial as does *D. formosum*.

**PARKMAN'S ORIENTAL POPPY** (colored plate by Breck).—It is the finest form of the gorgeous Oriental poppy that I have seen, so large, so deep, so brilliant, and the base of all the petals is splashed with black. A robust hardy perennial that will thrive even in poor sandy land. Francis Parkman, the historian, and ex-president of the Mass. Hort. society lives at Jamaica Plain, near Boston, and is a most interested worker among flowers. He has raised many hybrid phloxes; the finest lot of *Aquilegia cerulea* I ever saw was in his garden; the famous *Lilium Parkmannii*—a true hybrid between *L. auratum* and *L. speciosum*—was the result of his labor, and the "flowering" apple bearing his name and now being pushed by our nurserymen, emanated from his garden.

**PHLOX DRUMMONDI VAR. CUSPIDATA** or "Star of Quedlinburg" assume florists term it, is one of the most overlooked for freaks among flowers. The petals are three-lobed, the middle lobe being extended considerably beyond the others. Flowers are violet, blue and purple and banded with white. Of Drummond phlox we also have semi-double red and double white, and dwarf varieties of most all colors, also the fimbriated form from which the above novelty has evolved. But for decorative purposes we have nothing better than *P. D. var. grandiflora*, pure and simple.

**HIBISCUS HYBRIDUS.**—"Hybrids" between what species? Of our plain swamp Rose Mallow (*H. Moscheutos*) we have white, and rose colored forms, and these in either case may or may not have "black eyes," and the size of the flowers or brightness of the rose color may differ in different plants; and all of these occur in abundance in a wild state, and all are only pure and simple forms of *H. Moscheutos*. But all are lovely, hardy, easily grown and desirable. Some may bloom the first year from seed, all should bloom the second.

**VERBENA HYBRIDA COMPACTA.**—"Of close, compact, erect habit, growing dense clumps." Well, it isn't how to dwarf the verberna that bothers me so much as how to make it grow and flourish, and that's why I hailed with so much delight the "mammoth" varieties. A golden-leaved verberna is also offered and spoken of as being "admirably adapted for bedding purposes." Not as a fine foliage plant, surely? And we have even got to doubt

ling the verbenas. Under the name of double V. Victoria is described—"The flowers are of a rich deep glowing scarlet and show clearly a double form." More's the pity.

#### New York Notes and Comments.

The February meeting of the New York Florists' Club saw a goodly number of members ready for discussion about the coming convention. An executive committee was chosen, consisting of Messrs. Wm. Elliott, A. D. Cowan, T. H. Spaulding, Ernest Asmus, E. W. Parsons, Gus. Messeberg, and A. S. Burns. They were empowered to select a meeting place for the S. A. F., and also an appropriate hall for exhibition. Tammany hall was chosen for the meeting, and Nilsson hall for the show. When arranging the programme for the next meeting Mr. Elliott was asked to give a paper on auction sales and their effect on the business. He declined, stating calmly that he was desirous of living a little longer, and therefore would not give the business away. However, he would call on Mr. Henderson for a paper on the Moon Flower. This was also declined, amongst much good natured laughter, and the matter finally decided on was a paper on "Timely Hints," from Mr. Thorpe. Essays are to be terse and pithy, not lasting more than fifteen minutes in the reading, so as to allow ample time for a full discussion.

Perhaps there will be a corner in Nyack soil yet. Your correspondent "H." says that a Philadelphia grower is indulging in this luxury, and it is reported that Ernest Asmus has done likewise; that he has purchased land at Nyack and is transporting the soil to West Hoboken. Mr. Bennett of Shepperton, carries soil from some distance for his roses, and doubtless the same plan is followed in a good many places.

One of the recent carnations, "White Gem," was shown at the Florists' Club. It is a well-shaped, clear white flower; not fringed, fragrant and of good substance. It will be decidedly useful to learn at the convention what six carnations we ought to grow; there are so many good ones now.

Lent is not likely to make such a decided difference to the cut flower trade, thinks Mr. W. S. Allen. In default of big entertainments there are so many minor ways of using flowers. Flowers were very plentiful in the middle of February. Prices varied a good deal, according to the quality of the stuff. Mr. Roehrs is sending in some of the finest hybrids, but these roses have not brought exaggerated prices at any time this winter.

Papa Gontier brought \$4, \$5 and \$6 a hundred, while Bon Silenes were running from \$3 to \$4. The last named seems better in quality now than six weeks ago. Perles were \$3 to \$5 a hundred; Niphotos and Souv. d'un Ami, \$3 to \$5. Cooks were rather more encouraging at \$15. Mermets ranged from \$6 to \$10; they are coming in rather better colored. Beauties vary all the way from \$10 to \$40, and the quality varies as much as the price. Bennets run from \$3 to \$6, and La France from \$6 to \$15. Jacqs. range from \$10 to \$25. Magna Charta is at the head, being worth from \$60 to \$75, but taken as a whole roses are not bringing very large prices. Long stemmed carnations bring from \$1 to \$2 a hundred. Roman hyacinths are \$2 and \$3 a hundred; lilac is 30c., 50c. and \$1 a

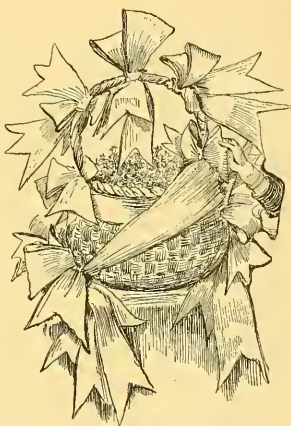
bunch. Lily of the valley is from \$1 to \$3 a hundred, and longiflorum \$1.50 a dozen. Narcissus Trumpet major is 30, 40 and 50 cents a dozen; very good smilax is only 20 cents a string, tulips \$1 to \$4 a hundred, and violets 50c., 75c. and \$1.25 a hundred.

We still hear a good deal about overproduction of flowers, but no one seems able to say just where the trouble is; it is apt to be a popular complaint when flowers bring low prices.

Mr. C. L. Allen of Garden City, now fills the responsible position in the A. B. Cleveland Co., formerly held by the late Mr. James Reid.

There is a lot of fine acacia in the market. McConnell recently had his window very handsomely decorated with it.

Dyed flowers may be regarded as an epidemic disease now. In some cases



SOME RIBBONS

they are pretty, just as a bleached blonde with a Recamier cream complexion may be pretty, but more often they are atrocious. The latest crime in this particular is—pink violets! White ones, dyed with an aniline; they are almost as good as artificial, and they look like twin brothers to those one may buy in a Sixth avenue milliner's for ten cents a bunch. One leading florist says these flowers are likely to have a decidedly bad effect on the trade, inasmuch as they create a demand for monstrosities.

Rather a novel idea in flowers recently was the use of old-fashioned straw bonnets, the style of many years ago, which were unearthed in some warehouse. They were simply tied up together and filled with flowers.

EMILY LOUISE TAPLIN.

#### Ribbons in Floral Work.

The accompanying sketch, which we have reproduced from *Le Jardin*, shows what we may come to if florists continue to increase the quantity of ribbons in floral work. For fear that our readers might overlook the fact we would state that there are a few flowers concealed within the basket.

Philadelphia.

President Robert Craig occupied the chair at the last meeting of the Florists' club. Mr. C. L. Allen, Garden City, L. I., New York, came over for the purpose of reading his paper on Fungoid or Fungal diseases. This is the same paper which Mr. Allen had in course of preparation to be read before the third annual convention, held last August in Chicago, but he, unfortunately, was taken sick before it was finished, and was too ill to attend the meeting. The essay was well written, and showed careful research and observation. A vote of thanks was tendered to Mr. Allen, and it was also on motion agreed to have the paper printed for distribution amongst the members.

Mr. Swayne's seedling carnations were on exhibition at the meeting, "L. L. Lamborn" and "William Swayne." Both are white, similar to "Peter Henson" in that respect. At first glance the two varieties seem so nearly alike that the wisdom of sending them both out was questioned, but both of them are so meritorious that it would be difficult to decide which to discard. They are undoubtedly the best two white varieties ever sent out. Lamborn is the most dwarf growing, and the individual flower is somewhat the larger, also the best formed, but as growing with Mr. Swayne it is not quite so free blooming and the stem is not quite so stiff, nor is there as much substance to the flower. Whereas the flowers of the "Swayne" have a peculiar rustle when being handled. This desirable quality makes it excellent for shipping.

The subject selected for discussion at the next meeting is—"Bull-heads" amongst Perle roses; Their cause and cure." W. W. Coles will prepare a paper, giving his views on the subject.

Graham & Grigg have dissolved partnership, Hugh Graham's son succeeding to the business which C. H. Grigg & Co. worked so long and hard to build up.

The failure for over \$5,000 of one of the leading local florists is an unfortunate affair for the creditors—unless it has the effect of inducing prompt collections, then it would be a blessing in disguise. A majority of the creditors agreed to accept 35 cents on the dollar. Reckless and indiscriminate buying is attributed as the cause of the failure.

The second and last of the assembly balls for the season took place Feb. 10th. These are amongst the most select and aristocratic social events in the country. The florists generally have to draw upon other cities for a supply of first class flowers. Nothing but the very best are used. It has been stated that all the Eastern cities feel the effect of these balls, inasmuch as they have a tendency to make good stuff scarce.

Much interest is manifested in a bet which two of our local celebrities have indulged in. It was brought about through one of them asserting that he could raise 500 roses from one plant, the young plants to be in shippable condition by the middle of April. The bet was a champagne supper for twelve. The sympathies and opinions are about equally divided, as to which will win. A good judge of what one man may accomplish with a well grown rose bush, says that it is impossible. Whereas, another good judge, who has paid the hopeful propagator a visit, says there will be no trouble at all to have the desired number ready to ship to California, if necessary, and guarantee safe arrival of goods by April 14th.



Mr. Whittle's article on "Is Smilax a profitable crop to grow," has caused quite a good deal of talk hereabouts. It is conceded that the soil, climate, situation or the skill is far superior at Albany to anything of the kind about the Quaker City, for we have to be satisfied with two full crops, and some growers have admitted that they do not get even two full crops.

E. D. WYNNE.

## OBITUARY.

FRANCIS MORAT.—In our last issue we were obliged to record the death of this well known florist at his home in Louisville, Ky., Jan. 28. From a relative of the deceased we have obtained the following sketch of his life:

"Francis Morat was born in Steinestadt, Baden, Amt Mulheim, Germany, April 5, 1830. He came to America in February, 1854, and at once received employment from Wm. Reese, at Clifton, near Cincinnati. Early in 1858 he married Miss Katie Uhl, who survives him, and soon after removed to Louisville, where he started in the "Woodlawn Garden" with one small greenhouse. From this small beginning his business gradually extended until his establishment comprised over a score of greenhouses and he did a large business throughout the west."

"In 1860 he purchased the block between First and Second streets, on Ormsby ave., which has since greatly increased in value and he leaves an estate of considerable value."

Mr. Morat stood high in the estimation of all his business acquaintances as a man of probity and honor, and the news of his death was received with deep regret by all who knew him. A Louisville daily paper says:

"Mr. Morat was an exceedingly popular man, and everybody who ever had any dealings or acquaintance with him speaks of him in terms of the very highest praise. Men who were intimate with all his business affairs state that in his transactions he was always the very soul of honor. His banker states that Mr. Morat had transactions with an average of 6,000 people every year, and that in everything he did there was evident the high principle and unflinching integrity of the man. In any matter of misunderstanding Mr. Morat always gave the other party the benefit of the doubt."

The business will be continued under the old title by his two sons, George J. and F. J. L. Morat.

DAVID W. JUDD, president of the O. Judd Co., New York, publishers of the *American Agriculturist* and many books on horticultural subjects, died Feb. 6, at his residence in New York city.

DONALD S. GRANT.—Since my last letter, death has claimed another prominent Baltimore horticulturist in the person of Mr. Donald S. Grant, for many years head gardener to T. Harrison Garrett. Mr. Grant died of consumption on Feb. 10. He was only confined to bed for a few days before his death, but during the past two or three years of his life he suffered from constant ill health. Mr. Grant was thoroughly wedded to his calling. He was a close and careful student, and his library contained almost every horticultural work published up to the present time. He was a most enthusiastic lover of orchids, and has left behind him the most complete and best grown collection in this part of the country, his display of orchids invariably form-

ing the attraction at exhibitions of the Maryland Horticultural Society. Mr. Grant was a genial companion, a staunch friend, and generous to a fault, as many a needy gardener has discovered. He leaves a widow and three children.

A. W. M.

Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1887.

March 1.—Tem., morning 33°, noon 48°, evening 50°. Wind NW. to SW. Put in bunch cuttings of variegated alyssum. Pricked out in pans tuberous begonias. Laid eight sashes more of hotbed.

2.—Tem. 44, 40, 32. W. to N. Put in cuttings of pileas. Potted young stocks from boxes.

3.—Tem. 32, 34, 30. NE. Continued propagating pileas and gnaphalums. Finished potting stocks. Potted rooted cuttings of tracheliums and German ivy. Pricked out in boxes seedling cinerarias and antirrhinums.

4.—Tem. 27, 28, 25. NE. Sowed seed of petunias, gloxinias and celosias. Laid sixteen more sashes of hotbed.

5.—Tem. 26, 32, 33. SE. to S. Pricked out in boxes antirrhinums and santolius. Propagated Alternanthera latifolia.

6.—Tem. 35, 45, 42. N. to S. Sunday.

7.—Tem. 35, 41, 33. NW. to N. Commenced planting pansies in cold frame. Commenced pricking out in warm frame echeverias out of boxes. Uncovered tulip beds.

8.—Tem. 33, 42, 34. SE. to S. Prepared hotbeds for plunging plants. Continued planting pansies out in cold frame and echeverias in hotbed. Pricked out in boxes seedling Verbena venosa.

9.—Tem. 45, 43, 34. W. to NW. Repotted matricarias and salvias into 3-inch pots and plunged them in hotbed. Placed in hotbed 2½ and 3-inch Cuphea platycentra. Repotted nierenbergias into 2½-inch pots and plunged in hotbed.

10.—Tem. 34, 41, 35. WSW. to N. Potted rooted cuttings of alyssum and coleus, placing former in hotbed. Took in fresh potting soil. Prepared hotbeds for eight additional sashes.

11.—Tem. 33, 42, 40. SE. Divided variegated alyssums, potted and plunged in hotbed. Laid sixteen more sashes of hotbeds. Potted rooted coleus cuttings.

12.—Tem. 44, 64, 62. S. Continued potting rooted coleus cuttings. Plunged Thymus argentea in hotbeds.

13.—Tem. 34, 36, 32. NW. to N. Sunday.

14.—Tem. 27, 29, 26. NE. to N. Put in new lot cuttings of coleus. Moved and spread fuchsias. Started a lot of achimenes.

15.—Tem. 24, 34, 27. NW. to N. Continued propagating coleus. Potted rooted cuttings of same. Laid sixteen additional sash of hotbeds for alternantheras.

FLOWER BED DESIGNS.—A new edition of the "Book of Plans for Flower Beds" has been published by Geo. A. Solly & Son, Springfield, Mass. It contains a large collection of designs, many in colors, each accompanied with a key showing plants best adapted to the beds of which diagrams are given.

LOUISVILLE, KY.—Wm. Walker, for the last ten years at Cave Hill cemetery, has commenced business for himself at Highland and Everett avenues adjoining the cemetery. He has 5,000 feet of glass and will enlarge the coming summer. Steam is used for heating and gives good satisfaction.

HOTBEDS.—When short of sash late hotbeds can be covered by frames of prepared hotbed cloth which is inexpensive and answers the purpose admirably as the season advances. When the beds which are covered with glazed sash are filled, place the glazed sash on new beds and cover the old ones with the cloth sash. The cloth can be secured at a low price already prepared from the U. S. Waterproofing Fibre Co., New York.

## SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order.

**SITUATION WANTED**—By a young man as florist, 5 years' experience; good references. Address H. O. care American Florist, Chicago.

**SITUATION WANTED**—In a commercial floral establishment as foreman and propagator, after March 1st. Address E. E. PARSONS, cor. 17th & G Sts., Lincoln, Neb.

**SITUATION WANTED**—By a first-class gardener and florist; German married, with small family, as a private gardener. Address GEORGE M. FLORIST, 648 Court St., Elizabeth, N. J.

**SITUATION WANTED**—As gardener, by a single man, age 34; thorough, practical knowledge of his profession. Can give very best of references. A. T. PETERSON, box 126, Riverside, Cook Co., Ill.

**SITUATION WANTED**—By a young man of 22, as cut flower arranger, 16 years' city experience; a No. 1 reference. Willing to go out of city. Address W. P. H. C. 1713 St. Joseph Ave., Philadelphia.

**SITUATION WANTED**—By a young man willing to S. to make himself generally useful in a commercial house; familiar with plants and cut flowers. Age 18 years. GEO. F. KIRCH, 31 E. 5th St., Muskegon, Mich.

**SITUATION WANTED**—By German gardener; single, age 38; best references; well experienced; able to manage a first-class place. Private or commercial. Address A. W. care Landolt, School St., Norwich, Conn.

**SITUATION WANTED**—By a youth 16 years old, as an improver in the florist business. He has had one year's experience in greenhouses of the O. S. and S. O. Home, Xenia, Ohio. Respectfully R. W. SWABY, Florist, Xenia, Ohio.

**SITUATION WANTED**—By a florist; German; specialist in rose growing; cut flowers and general plants. A good designer. Capable of taking charge of commercial or private place. A. VOLLMER, 235-240 St., Brooklyn, N. Y.

**SITUATION WANTED**—As gardener, either private or commercial—latter preferred. Good references. 25 years' experience; thoroughly understands growing all kinds of flowers, fruits and vegetables outside and under glass. Box 412, Scranton, Pa.

**SITUATION WANTED**—By an experienced florist, S. Norwegian; single. Growing roses and forcing of cut flowers a specialty. Best of references from this and old country. Commercial or private place. ANNE ZELTZ, care McCormick's Rose Houses, Lake Forest, Lake Co., Ill.

**WANTED**—A partner in a well established rose business, with not less than \$1,000 cash. Address A. B. C. care American Florist, Chicago.

**WANTED**—A first-class florist, well up in cut flowers and pot plants. Only experienced man need apply. Address M. & P. care American Florist, Chicago.

**WANTED**—Florist and vegetable gardener; must understand all kinds of work in and about greenhouses and frames. Give references and lowest wages. FRANK B. SMITH, box 101, Danville, Ill.

**WANTED**—A practical florist who understands rose growing, cut flowers and general stock. Young German preferred; must be single, steady, board and lodging. Address: S. H. Smith, wages wanted. E. HALL & SON, Clyde, Ohio.

**WANTED**—Young unmarried man who has had experience in rose growing, to take charge of roses and to make himself generally useful about a commercial establishment containing 2,000 feet of glass. Suit wages, including board. E. M. GIDDINGS, Corfu, N. Y.

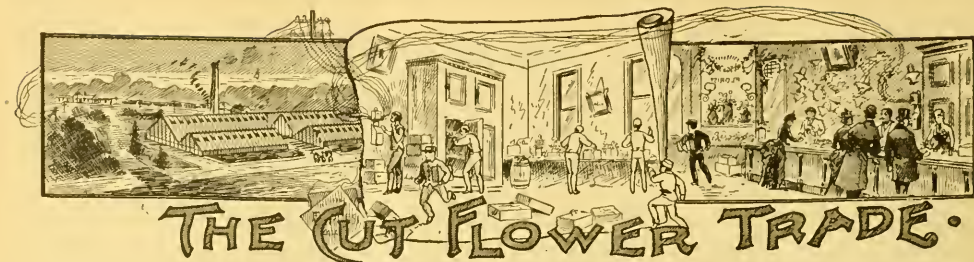
**WANTED**—Immediately, a young man as propagator and grower; must have a good general knowledge of roses and other stock. Place about 2,000 sq. ft. of glass. Only those who can come well recommended need apply. JOHN HYVING GREENHOUSE Co., Bay City, Mich.

**WANTED**—First Assistant. Must be well up in growing roses and general run of cut flowers; none but one who understands that thoroughly. Must have best of references as to ability and character. Married man preferred. Suit wages. Address ROSE GROWER, care American Florist.

**WANTED**—Man by March 15th. A steady, sober man with one or two years' experience in forcing roses under glass, propagating, etc. A permanent place for a rise in wages. Suit wages wanted per month for first year. I will furnish board and lodging. H. S. R. lock box 102, Highland, Ulster Co., N. Y.







### March Floral Styles.

Spring fashions are never fully developed until Easter. They are, however, shaping themselves in a general way. Table centre-pieces are growing higher, and probably the flat garlands that have so gracefully decorated festive boards will disappear in another week. A lily mound was made in the middle of a table, where ferns and asparagus formed the base; in this foliage rose candlesticks of olive-colored pottery, and seventeenth-century shape. It was a novel arrangement in white and green, and was done by Siebrecht & Wadley, who have distinguished themselves in dinner decorations the last fortnight. They made a table embellishment of the downy acacia in combination with oncidiums, which was exquisite. A high mat of acacia occupied the centre, and from this sprays of flickering oncidiums spread in all directions. White and yellow and salmon-colored effects are the vogue, and will undoubtedly continue to be. Tea roses provide the salmon color, so do the tulips and carnations that are a combination of red and yellow. The pink and yellow roses—Cusin and Watteville, are frequently the elegant material for these salmon arrangements, and the Chent azalea is also brought in.

Baskets and favors are all high, the former having tall loop handles which are very much trimmed. Gauze, plush, satin, and moire are introduced profusely into elaborate decorations, while in what are known as green arrangements great simplicity prevails, but still are admirable style.

A new bower was made for the Van Auken wedding which will probably have a run for Easter weddings. Asparagus plumosa in long garlands spread from both sides of a center frame like the foliage of weeping willows. This was put on in great profusion. At one side only was a very imposing cluster of Puritan and Bride roses with quantities of lilies of the valley and ferns. In making the portieres now favorite in parlor decorations, the foliage, which is either smilax, Lygodium scandens, or asparagus, is wired and left to hang loosely. If the curtain is double, one side is sometimes drawn back with a scarf of gauze or ribbon.

Cermai favors appear in Japanese fans of a semi-transparent material which represents leaves of different shapes and color. Those that are tinted like fall foliage are gorgeous. The fan is stamped in gilt with the date of the entertainment, which is left uncovered by the flowers that are applied. The latter are spikes of miguouette, lilies, or hyacinths.

Wreaths of mignonette, the spikes of which are laid on all one way, are much used for funeral designs. Flowers placed on caskets are put on one side. Three

clusters are generally made, the centre one being the larger, and from this trail vines and long stem roses. Yellow blossoms are favorite for funeral flowers. Acacia and yellow tulips were used this week on the casket of a young lady. The flowers were tied in clusters with violets covering the stems. A crown of golden tulips was placed at the foot of the casket. All bright colored flowers are more in demand for rich funeral decorations than white blossoms, unless it is for infants. A little casket was covered with freesia yesterday, and on top lay a wreath of daisies. Where caskets are covered with flowers, a frame is made.

Bubble glasses, hand painted and filled with daffodils, are in demand for souvenirs. These are daily exchanged among ladies, who send quantities of flowers to each other.

FANNIE A. BENSON.

New York.

### Boston.

Up to the present week the cut flower trade has been brisk and steady, but lower prices have ruled than during the corresponding period last year. Now that Lent is in, the demand has fallen off as usual.

The supply of roses is not much in excess of the demand however, as yet. Hybrids are coming in in moderate quantities and of good quality. The same is true of Jacqs. There are several large crops in prospect which will no doubt overstock the market before long. One of our large growers has a house of "Her Majesty" in full bud and indicating an enormous crop. This is something of a novelty. Lily of the valley, tulips, and daffodils are very abundant and in finest quality. Freesias are still plenty, but there are very few Roman hyacinths to be had. Violets, which for a time were scarce and in very poor quality are good now. Smilax is abundant and cheap. Heath is also quite plenty and orchids are at their best. Growers are beginning to cut from the new crop of adiantums. There is considerable complaint regarding the Perle which seems to have an unusual inclination to produce "bull-heads" this year. Heretofore this has given but little trouble in this vicinity.

The Bennett's star appears to be setting, but the Goutier and Bride are proving great favorites with growers and dealers alike. Both of these varieties will no doubt be planted about here in large quantities the coming season. The introducers of White Gem carnation report large advance orders. It certainly gives promise of becoming a standard variety.

C. R. Dane has taken a down town store.

Peter Ball says that hot water under pressure is a failure.

F. Sheppard & Sons exhibited at the last weekly meeting of the Horticultural society a most magnificently colored variety of Dendrobium nobile. It was received among a mixed lot of imported plants. It is one of the most beautiful varieties ever seen here and the orchid fanciers are all in danger of breaking the tenth commandment.

The greenhouses belonging to John L. Gardner, at Brookline, C. M. Atkinson, gardener, were damaged by fire recently.

W. A. Manda's orchid house had a narrow escape from destruction. The shed took fire during one of the most severe nights in the recent cold snap, but fortunately it was discovered before it had done much injury.

Evans and Mathieson have dissolved partnership. Mr. Evans will henceforth continue the business at the old establishment in his own name.

The discussion at the February meeting of the Gardeners' and Florists' club, was upon steam heating. An essay on the subject was read by Mr. W. H. Elliott. The discussion following the essay was quite spirited as is usual when the subject of heating comes up. Mr. Wm. Robinson, gardener to F. L. Ames, Benj. Grey, W. V. Hawkes and others took part. Mr. Robinson stated that he had been building two new houses last season for orchids and had introduced steam heat at an expense of over \$3,000. He was well satisfied with results so far, and advised all who proposed to adopt steam heating to provide a pressure valve, by the use of which the pressure on the pipes will be uniform, regardless of the amount of steam on the boiler. W. V. Hawkes also spoke strongly in favor of steam as compared with hot water. Benj. Grey took the part of hot water with vigor and succeeded in having the last word, if not the best of the argument.

W. J. S.

### New York.

John Thorpe has a house of exceptionally handsome Niphetos roses.

John Henderson has gone South to remain until May.

C. L. Allen will spend next summer in Europe.

Rufus K. Abbott, who was a long time in the employ of Fred. Gordon, has opened a commodious stand for the sale of cut flowers in the Erie railroad station on the New York side.

Wm. Bennett's sons are bringing in elegant seedling camellias, notably among which is Willie Bennett.

Ernest Asmus and John May state that the new imported roses on trial this year have all proved failures.

Mr. Will Allen takes a prominent part in the discussions at the Florist Club meetings, and is an efficient officer.

F. A. B.





## Seed Trade.

SEED TRADE ASSOCIATION.—William Meggatt, president, Wethersfield, Conn.; Albert M. McCullough, secretary, Cincinnati, O.

## The "Seedsmith."

February is the time to rent a country place for the summer, and July is the time to lay in coal for the winter furnace. And now is the time that the seedsmith advertises his bulbs on the bosom of the blizzard, the howls of which tell you that this is the proper period to invest in *grandiflora peritonitis* and *abdallah certiorari*.—Puck.

## Catalogues Received.

Ellwanger & Barry, Rochester, N. Y., roses; Daniel Lee & Son, Madison, O., plants; Huntington & Hoss, Indianapolis, Ind., seeds; C. E. Hampton, Kansas City, Mo., seeds and plants; Geo. Hancock, Grand Haven, Mich., carnations; Henry G. Higley, Cedar Rapids, Iowa, seeds and plants; The Haddon Floral Houses, Haddonfield, N. J., carnations; John Saul, Washington, D. C., plants; Denys Zirngiebel, Needham, Mass., carnations; V. H. Hatlock & Son, Queens, N. Y., plants, bulbs and seeds; Michigan Lake Shore Seed Co., South Haven, Mich., seeds and trees; R. S. Brown & Son, Kansas City, Mo., bulbs and plants; R. G. Nicholson, Chestertown, Md., fruit trees; Hans Nielson, St. Joseph, Mo., plants; F. E. McAllister, New York, seeds; Geo. Pinney, Evergreen, Wis., trees; Evergreen Lodge, Clarksville, Tenn., plants; Hiram Sibley & Co., Rochester, N. Y., seeds; Parker & Wood, Boston, Mass., seeds and tools; Jno. A. Bruce & Co., Hamilton, Ont., seeds; Chas. L. Burr, Springfield, Mass., seeds; A. Whitcomb & Son, Lawrence, Kas., plants; Ellwanger & Barry, Rochester, N. Y., grapes; F. V. Teas, Dunreith, Ind., trees and plants; James L. Boyson, Caen, Calvados, France, roses; J. A. Everett & Co., Indianapolis, Ind., seeds; C. E. Allen, Brattleboro, Vt., seeds and plants; Jno. R. & A. Murdoch, Pittsburgh, Pa., seeds, plants and trees; Paul Butz & Son, Newcastle, Pa., plants; Wm. H. Smith, Philadelphia, seeds; F. N. Lang, St. Paul, Minn., seeds; John N. May, Summit, N. J., roses; F. E. Fassett & Bro., Ashtabula, O., plants; Chas. T. Starr, Avondale, Pa., carnations and bulbs.

## The Society of Minnesota Florists.

The leading florists of St. Paul, Minneapolis and vicinity, held a meeting Feb. 18, and as a result a society was organized under above title, with thirty-four charter members. A constitution was adopted and officers elected as follows: President, E. Nagel; vice president, John C. Fleischer; treasurer, E. Venzke; secretary, W. A. Smith; executive committee, E. V. Beales, E. A. Cuzner, Aug. S. Swanson. A subsequent meeting was held Feb. 25 to adopt by-laws and complete organization. Monthly meetings will probably be held in St. Paul and Minneapolis alternately. Much enthusiasm was manifested at the meetings, and it is expected that every florist in the state will become a member.

Those desiring to become members may correspond with Walter A. Smith, secretary, 624 Nicollet avenue, Minneapolis.



## ELY'S KING OF THE EARLIES TOMATO.

In placing this valuable new tomato before the trade, we do so with the full assurance that it will prove worthy of all we say of it. It is the result of ten years' careful selection by one of our most reliable growers, constantly saving from year to year the earliest and best-formed fruit. It grows a stout, medium-sized and branching vine, upright in growth until weighted down with fruit; it is a rapid grower, and sets the crown fruit when quite young, the buds appearing when only three inches high and in the fourth leaf blossoms adhere and produce fruit in clusters of ten to twelve, which not unfrequently ripen within ten days of each other, while the entire crop has frequently been picked within a period of thirty days from first ripening. It is enormously productive, and of good size, bright red in color and quite solid. Its great advantage is its extreme earliness, being ten day earlier than any other variety we have ever seen.

In a test made side by side with the Beauty, it was twenty-three days earlier, ripening June 20th, while the Beauty, planted at same time, was not ready to pick until July 22d. From 1,550 plants of King of the Earlies, 175 baskets were gathered and sold for a net return of \$205.36, when the first basket of Beauties were ready for market and brought only 75 cts. Sold only in original sealed packets. Per large pkt., 25 cts.; five packets for \$1.00. TRADE SUPPLIED AT \$10.00 PER 100 PKTS.

—: WRITE FOR OUR WHOLESALE PRICE LIST. —:

## Z. DE FOREST ELY &amp; CO.,

SEED MERCHANTS. GROWERS AND IMPORTERS.

Headquarters for Garden Seeds, Onion Sets, Seed Potatoes & Flowering Bulbs.

1301 & 1303 MARKET STREET,

TELEPHONE 1298.

Registered Cable Address:  
DE FOREST, PHILA.

AND 246 NORTH BROAD STREET,

PHILADELPHIA, PA.

## PAPER SEED BAGS.

For Flower and Vegetable Seeds.

CLARK BROTHERS, Manufacturers, 61 Ann St., N. Y.

## MELON SEEDS 14c. to 40c. per pound.

Send for PRICE LIST.  
Odella, Black Spanish, Krib Gem, Dark Iceberg, Iron  
Clad, Pride of Georgia, Hackensack, Bird, Golden  
Gem, Banana. FREEMAN HURFF, Swedesboro, N. J.

**JOHNSON & STOKES' GARDEN and FARM MANUAL**

for 1888, will be sent FREE to all who write for it. It is a Handicome Catalogue with Colored Plates, and the FINEST COLLECTION OF SEEDS ever offered. Our MARKET GARDENERS with varieties specially adapted to their purposes, and all TOOLS necessary to manage a complete garden. If you grow VEGETABLES FOR MARKET, tell us so when you send for our Catalogue.

**SEEDS**

JOHNSON & STOKES, 219 Market Street, Philadelphia, Pa.





**TRY DREER'S  
GARDEN SEEDS**  
Plants, Bulbs, and  
Requisites. They are the  
best at the lowest prices.  
TRADE LIST issued  
quarterly mailed free.  
**HENRY A. DREER,**  
Philadelphia

**SIBLEY'S TESTED SEEDS**  
CATALOGUE FREE! Containing  
all the latest novelties and stand-  
ard varieties of Garden, Field and  
Flower Seeds. Gardeners every-  
where should consult it before  
purchasing. Stocks pure and fresh, prices reasonable.  
Address **Hiram Sibley & Co.,**  
Rochester, N. Y., or Chicago, Ills.

OVER 6,000,000 PEOPLE USE

**FERRY'S SEEDS**  
**D. M. FERRY & CO.**  
are admitted to be  
the **LARGEST**  
SEEDSMEN  
in the world.  
**D. M. FERRY & Co's**  
Illustrated, Descriptive  
SEED  
ANNUAL  
For 1888  
Will be mailed  
FREE TO ALL  
applicants, and to  
last season's customers  
without ordering it.  
Available to all. Every one  
raising Garden, Field or Flower Seeds should send for it.  
Address **D. M. FERRY & CO.,** Detroit, Mich.

THE BEST AND CHEAPEST  
**DOUBLE PETUNIA SEED**

(*P. hybrida grandiflora fl. pl.*)

In the market. For sale to the trade by the grower.

**G. A. McTAVISH,**  
NORTH SAANICH, B. C., CANADA.

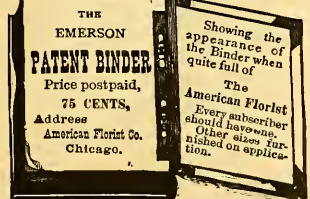


**GOLDMAN'S ATOMIZER  
AND SPRINKLER**  
FOR A THOUSAND AND  
ONE USES. COMMENT  
UNNECESSARY



For Flowers, Window Gardening,  
House Plants, Destroying Insects,  
and for various fine sprays. Most  
natural substitute for fog or dew.  
By dipping in water while closed,  
fills instantly. Ball nicely perforated,  
spray controlled by pressure of  
hand. Size of lemon squeezer.  
Weight, 5 oz. Exclusive Territo-  
ry to Agents. Sells on its own  
merits; no talk. Sample by mail, 50 cts. This is the  
Atomizer that sold so well at the Danbury, Albany  
and other Fairs. Florists and Seedsmen show it to  
your customers; sells fast; good profit. Excellent  
for indoor plants. Send for illustrated pamphlet  
and price to the trade. Mention this paper.

**M. GOLDMUN, Manufacturer, Pittsfield, Mass.**



**DURPEE'S FARM ANNUAL FOR 1888**  
Will be sent FREE to all who write for it. It is a  
Handsome Book of 128 pp., with hundreds of illustrations,  
Colored Plates, and tells all about the  
**BEST GARDEN, FARM, and FLOWER**  
Seeds, Bulbs, Plants, and Various Rare Novelties in VIGETABLE, Garden Topics, etc.  
of real value, which cannot be obtained elsewhere. Send address  
and a postal note for the most complete Catalogue published to-  
day.  
**W. ATLEE BURPEE & CO., PHILADELPHIA, PA.**

**PLANET JR. GARDEN DRILLS, WHEEL HOES, HORSE HOES, FIRE FLY.**  
Each one of these  
POPULAR TOOLS  
has been either  
**REMODELED**  
or **IMPROVED**.  
They are more com-  
plete, simple, practical,  
and strong than you can imagine;  
so look them over  
carefully.  
**NEW STYLES, NEW PRICES.**  
**S. L. ALLEN & CO.,** Patentees & Mfrs., 127-129 Catharine St. Philadelphia, Pa.

**SIBLEY'S THE SIBLEY SQUASH.**  
THE FINEST WINTER TABLE or CANNING SQUASH on record.  
Introduced this season, with Other Novelties of Rare Merit. The  
handsomest, most complete and comprehensive Catalogue that has ap-  
peared this season. Address  
**HIRAM SIBLEY & CO.,**  
CATALOGUE FREE. ROCHESTER, N. Y. AND CHICAGO, ILL.

**GARDEN, FIELD  
W. W. RAWSON & CO. SON  
& CO. FLOWER SEEDS,  
HAND BOOK PLANTS, BULBS,  
FOR THE FARM & GARDEN, AND GARDEN REQUISITES.**

**NEW BOOKS ON GARDENING.**  
**ORCHERY AND ITS CULTIVATION,** by W. W. Rawson, 25 Cents.  
**SUCCESS IN MARKET GARDENING** and **Vegetable Growers' Manual,** by W. W. Rawson. Practical Market  
Gardener. The most instructive work of the kind ever published, full of important information to market gardeners and to all  
growers of vegetables in large or small quantities. 200 pages, fully illustrated, sent post-paid, by mail, upon receipt of \$1.00.

**IT** is a conceded fact that there is no better place in the U. S.  
for Nurserymen to sort up, Dealers to Pack, or Planters to  
order, than at the Painesville Nurseries, the aim of  
**THE STORRS HARRISON CO.** being to carry  
a full line of Fruit and Ornamental Trees, Bulbs,  
Shrubs and Roses. Have a remarkably fine stock  
of Standard and Dwarf Pears, Kilmarnock Wil-  
lows and other Weeping Trees; also Grape Vines,  
including all the Best New Sorts—*Moore's Diamond*,  
*Empire State*, *Niagara*, *Jessica*, *Frances B. Hayes*, etc.  
Can supply car loads of elegant, large Nursery-grown  
Elms, Catalpas, Maples, Poplars, Tulips, etc. The  
handsomest lot of Pyramidal Arborvitae and Irish Juniper ever offered, and acres on  
acres of other Evergreens. Prices reduced to suit the times. Come and see. Corres-  
pondence solicited. Catalogue Free. 33d Year. 700 Acres. 24 Greenhouses.  
Address **THE STORRS & HARRISON CO., PAINESVILLE, LAKE CO., OHIO.**

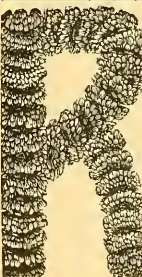
**A. T. MERRICK,**  
\*HORTICULTURAL ENGRAVER\*  
113 ADAMS STREET,  
CHICAGO.

**GROWTAGE'S PATENT  
BUILDING FOR HORTICULTURE**



—GLAZED WITHOUT PUTTY—  
Endorsed by the New York Horticultural Society.  
Illustrated Circular mailed on application.  
Plans and estimates given for every description of  
Horticultural Buildings.  
**H. J. GROWTAGE,**  
76 Myrtle Avenue, BROOKLYN, N. Y.

**ENGRAVING DIRECT FROM  
PHOTOGRAPH.**  
**NO DRAWING REQUIRED.**  
**NO HAND WORK NECESSARY.**  
SEND COPY **CHEAP, ARTISTIC**  
FOR ESTIMATE. **CROSSCUT & WEST ENG. CO.**  
207 FILBERT ST. PHILA. PA.



**Florist's Letters.**  
PATENT APPLIED FOR.  
These letters are made  
of the best immortelles,  
wired on wood or metal  
frames with holes to insert  
toothpicks.  
**Prices on Wood Frames:**  
24 in. purple, ... per 100, \$3 00  
24 in. ... 4 00  
Send for sample. Postage  
10c. per 100. Script lettering  
on Metal Frames any  
word, 5c. per letter.  
**Designs, Monograms, Etc.**  
**W. C. KRICK,**  
1107 Broadway, Brooklyn,  
New York.  
**M. M. Bayerdorfer & Co.,**  
Phila., Agts. for Penna.  
**J. C. VAUGHAN, Chicago,**  
Agts. west of Pennsylvania.



## News Notes.

NYACK, N. Y.—Tunis Depew and family will spend the balance of the winter in the South.

SALISBURY, MD.—F. W. Harold has sold out to William H. Hillerman, late of Watkins, N. Y.

BELLEVUE, O.—James Lunn, for many years a florist at Cleveland, has located here and will continue in the trade.

JANESVILLE, WIS.—The twenty-fourth annual exposition of the Rock County Agricultural society will be held in this city Sept. 11-14 next.

ST. LOUIS.—A. Berdan has made an assignment. Lewis Bros. & Co. have started in business at 717 Olive street. F. & M. Rotter are new florists at 714 South Fourth street.

CINCINNATI.—B. P. Critchell & Co. have moved into their new store at Fourth and Elm streets. H. Glus has a new store at 551 Main street. C. Teutenberg has opened a store at 507 Race street.

MILWAUKEE.—J. T. Bartlett has removed from 208 Grand avenue to 408 Milwaukee street. J. W. Dunlap, an old-time florist, who has been out of the business for a number of years, will start up again the coming spring at Wauwatosa. He will associate with him his nephew, John Dunlap, recently arrived from Scotland.

SAN FRANCISCO.—Hansen, Plath & Co., a new firm started at Ocean View last summer, brought in a large supply of lilies of the valley for the holidays, the first time a sufficient quantity has been had to supply the demand at that season. They are now building a rose house 90 x 25 for La France, from the profits on the 10,000 lilies of the valley forced.

NEW ORLEANS.—The second exhibition of the New Orleans Horticultural society will occur at Odd Fellows' hall March 22-24. First and second diplomas are offered for best and next best exhibits in fifty-nine classes, and gold medals for best displays in three classes. It is expected that this exhibition will be even more successful than the excellent show made by the society last year.

NEW BEDFORD, MASS.—A "Gardeners' and Florists' Club" has been organized in this city and officers elected as follows: A. B. Hathaway, president; F. H. Passell, vice-president; Geo. Bliss, secretary; Frank Kirk, ass't secretary; Edw. S. Haskell, treasurer; John Tynan, Dennis Shea, Geo. Brennan, executive committee. According to the constitution adopted Jan. 17, "The aim of the club is to lift up and carry forward all that tends to advance the welfare of its members, and promote the interests of horticulture."

WASHINGTON.—At a state dinner given by the President to the Justices of the Supreme Court Feb. 2, a canoe of carnations edged with lily of the valley and filled with Niel roses, occupied the center of the table resting on a "mirror" lake bordered with long stem roses, camellias and carnations. The canoe was drawn up on the bank of the lake, at each end of which were the scales of justice formed of azaleas and carnations. At the ends of the table were round plateaus of tulips over which were paraisols of lily of the valley. The bouquets were of La France and the boutonnières of Papa Gontier roses.

WILLIAMSPORT, PA.—The Christmas trade was very large—fully one-third more than last year. New Year's was dull, followed by a week of brisk demand for all choice flowers, especially roses. Harry Chaapel is building a new house 145 x 20, glazing without putty and using 12 x 15 double-thick glass. In the near future he will build a handsome office and salesroom at 912 West Fourth street. The same florist has added eight acres to his grounds for growing cut flowers and plants.

## Quick Returns.

PHILADELPHIA, Feb. 18, 1888.  
GENTLEMEN: Our advertisement in your paper of Feb. 15, has brought us the promptest and most satisfactory results that we ever obtained in so short a time from any advertisement that we ever placed, and we have spent many thousands of dollars in printers' ink.

Yours, with regards,  
Z. DE FOREST ELY & Co.

## Chicago.

Trade was very dull just after Lent began, but is now very satisfactory.

Harry Bayersdorfer of Philadelphia and Fred. Wenderoth of New York, were in the city last week.

At the last meeting of the Florist Club, after the business of the evening had been transacted, the members present sat down to a generous spread and proceeded to have a jolly time. Toasts, beginning with the Society of American Florists, followed by each of the various Florist Clubs throughout the country, and through a long list to the "Florist who never speaks as we pass by," were happily responded to by those called upon. Much good feeling prevailed, and the occasion will be long and pleasantly remembered. The club will remove to new quarters in the Methodist Church block, corner Clark and Washington streets, March 1.

## M. M. BAYERSDORFER &amp; CO.

56 N. 4th St., Philadelphia, Pa.,

Manufacturers and Importers of

## BASKETS \* AND \* FLORISTS' \* SUPPLIES.

Doves and Sheaves a Specialty.

CATALOGUE FREE ON APPLICATION.

Dahlias, ground roots... per doz \$1.50; per 100 \$12.00  
Paeonies... per 100 \$5.00; per 1,000 \$50.00  
Climbing roses in var... per 100, 8.00  
Hardy roses in var... per doz, 85 cts; " 10.00  
Clematis... per doz, 85 cts; " 25.00  
Choice 2-year old grape vines: Niagara, Worden  
Jefferson, L. Washington, Nonpareil, Prentice, Pock  
lington, Veronique, Brighton, Moore's Early, etc.,  
\$2.00 per ten. 1-year old vines, one-half price.  
Tender Clematis Bella Viticella, etc., \$1.00 per doz.;  
\$5.00 per hundred.

F. A. BALLER, Bloomington, Ill.

WHITE  
WATER LILY ROOTS

(Nymphaea odorata.)

\$5.00 per 100. The Trade Supplied.

WM. F. HALSEY,  
WATER MILLS, LONG ISLAND, N. Y.

## 8,000

## CHRISTMAS EVE CHRYSANTHEMUMS

Strong plants, in 2½-inch pots; the most valuable white variety for late cutting. Every florist should grow this variety. 75c. per doz.; \$5.00 per 100.

CHESTER FLORIST CO. (Limited), Chester, Pa.

## FOR SALE.

Ten Roses and Carnations, 2½-in. pots... per 100, \$1.00  
Rooted Cuttings of Coleus and Carnations to order,  
\$2.00 per 100.  
Draecena Indivisa, \$1.50 to \$2.50 per dozen

W. W. GREENE, SON & SAYLES,  
WATERTOWN, N. Y.

## MOST EXTENSIVE STOCK

## JAPANESE &amp; CHINESE

Fruit Trees, Ornamental Trees, LILY BULBS AND SEEDS. Bamboos, Conifers, Palms.

Stock carefully raised in our Nurseries in Japan.  
H. H. BERGER & CO., 315 & 317 Washington Street,  
SAN FRANCISCO, CALIFORNIA.

Catalogue free. Established 1878.

## BEGONIAS! BEGONIAS!

## 2,000 PLANTS OF SUTTON'S SNOWFLAKE.

One of the best white flowering Begonias, either for cutting or pot work. The unplanted plants at the low rate of \$2.00 per 100; \$15.00 per 1,000.

## JOHN GOODE &amp; CO.,

53rd Street and Kimball Park,  
HYDE PARK, N. L.

Rooted Cuttings of Verschaffeltii, 1 per 100 per 1000  
Victoria Firebrand, J. Goode Coleus, 8-30 7-40  
Alternanthera Aurea Nana, 40 5-10  
Heliotrope, strong, mixed varieties, 2.00  
2½-in. pots, 3.00  
Saffron Roses, 2½-in. pots, 3.00  
Those in need of stock not quoted, write and get lowest prices.

JOHN J. CONNELLY, Bryn Mawr, Pa.



Second Edition.

GEO. A. SOLLY & SON'S  
BOOK OF PLANS

For Carpet and Ornamental Flower Beds. With many it is a difficult task to lay out a carpet bed, or fancy design on the lawn, and perhaps more difficult to choose the proper plants to harmonize, so as to give the best effects. The object of these drawings is to assist gardeners and amateurs, and to enable them to choose the proper plants for their work. It is expected that this book will supply a long felt want, as it is the first and only publication entirely devoted to Fancy Flower Bed designs. This, our SECOND EDITION, consists of over 100 designs, nicely engraved, on good paper, nicely bound, sent pre-paid to any address on receipt of Price, \$3. GEO. A. SOLLY & SON, SPRINGFIELD, MASS.

## SEEDS, SEEDS, SEEDS

— We offer unusual inducements: —  
to FLORISTS in

ROMAN HYACINTHS,

LILY OF THE VALLEY PIPS,

PAPER WHITE NARCISSUS,

LILIUM CANDIDUM, &c.

Crop of 1888.

Prices according to quantity required, on application.

J. M. THORBURN & Co. 15 JOHN ST. NEW YORK.

**AUGUST RÖLKER & SONS,**  
44 Dey St., NEW YORK,  
Supply the Trade with  
**SEEDS, BULBS,**  
And all kinds of  
**FLORISTS' SUPPLIES.**  
1888 Trade List for Seeds now ready.

**BULBS, IMMORTELLES.**  
**J. A. DE VEER,**  
(Formerly of DeVeer & Boomkamp.)

19 Broadway, New York.

SOLE AGENT FOR  
GENERAL BULB CO., Vogelenzang, (Holland.)  
LS. BREMOND FILS, Ollioules, (France.)

Offers to the trade, net without engagement:  
Lily of the Valley, per 1000, from \$9.00 to \$10.00. In  
original cases of 250, \$22 to \$24. Per 100, Per 1000  
Lilium Auratum, large bulbs. . . . . \$9.00 \$80.00  
Excelsior Pearl Tuberoses, extra. . . . . 1.75 15.00  
" " 2nd size. . . . . 1.25 10.00  
Gladioli, large bulbs, fine mixed. . . . . 1.50 12.00  
" " Brecheleyensis. . . . . 1.00 9.00  
" " scarlet & crimson. . . . . 1.00 9.00  
" " pink & variegated. . . . . 1.75 15.00  
" " white and light. . . . . 2.25 20.00  
" " yellow and yellow  
grounds. . . . . 2.50 22.50  
Hyacinthus Candicans, large. . . . . 2.50 20.00  
Dahlias in fine sorts, undivided roots. . . . . 15.00 2.25  
" in separate colors. . . . . 12.00 1.75  
" in fine mixture. . . . . 9.00 1.25  
Cannas. . . . . 5.00 15  
Caladium Esculentum, large bulbs. . . . . 12.00 1.75  
" good sized bulbs. . . . . 7.00 1.00  
For prompt or Spring delivery.

**\*TUBEROSE BULBS\***

We are the largest growers in the country, and  
offer the best quality

PEARL TUBEROSES. . . . . per 1000, \$20.00  
DOUBLE. . . . . 20.00  
\$2.50 per 100 in small lots.

Trade List mailed free.

HENRY A. DREER, Philadelphia.

**FLORIDA GROWN BULBS.**

Tuberose, No. 1 and Tall double. . . . . per 1000, \$10.00  
Caladium Esculentum. . . . . per 100, 4 50  
Amaryllis Equestris, extra bulbs. . . . . 15.00

**A. H. CRANE,**  
NASHUA, FLA.

**GARDEN, FIELD AND FLOWER SEEDS.**

Market Gardeners' and Florists' Seeds a Specialty.

**GARDEN TOOLS, SEEDERS, ETC.**

SEND FOR LIST OF FLORISTS SEEDS.

**JAMES KING,**  
170 Lake St., CHICAGO, ILL.

**A SPECIALTY.**

**SEEDS FOR FLORISTS**

CAREFULLY SELECTED,

And from which the best results may be  
expected.

ASTER, New Pearl, pure white. . . . . PKT. \$ 25  
" " " " bright white. . . . . 25  
" " Boston Florist's, pure white. . . . . 10  
" " " " fine rose. . . . . 10  
" " Zingibiel's, white. . . . . 10  
BALSAM, Snow Ball, finest double white. . . . . 15  
PANSY, Improved Giant, best strain in cultivation. . . . . 50  
STOCKS, Boston Florist's Double white, superior to, and prettier rosier per cent. of double flowers than any known strain. . . . . 15  
STOCKS, Crimson King, finest double crimson. . . . . 25

Our strains of Cinerarias, Cyclamen, Calceolarias, Primulas, Mimulus, Verbenas, and Zinnias are of very superior selected strains.

EXCELSIOR PEARL TUBEROSES, \$1.50 per hundred, \$15.00 per thousand.

Wholesale price list for florists now ready. Send for one.

**SCHLEGEL & FOTTLER,**  
26 S. Market St., BOSTON, MASS.

OUR WHOLESALE CATALOGUE

— OF —

**BULBS**

Of all Sorts,

**CHRYSANthemUMS, &c.**

Is now ready. Will be sent to all applying that we know  
to be engaged in the trade—or to any furnishing us  
evidence, as cards, letter-heads or bill-heads.

**V. M. HALLOCK & SON,**  
**QUEENS, NEW YORK.**

**F. E. McALLISTER,**

— WHOLESALE DEALER IN —

Seeds For the Florist Requisites Bulbs For the Green-  
Market, Garden- house or Gar-  
ener and Farmer. pers, Pampas Plumes, etc

22 Dey Street, - - - NEW YORK.

**SEGERS BROTHERS,**  
**GROWERS OF**  
**HOLLAND BULBS.**

OUR SPECIALTIES ARE:

Holland Hyacinths and Tulips, in any quantity; also Crocuses,  
Narcissus, Daffodils, Liliums, Lily of the Valley, Gladiolus  
The Bride, Anemones, Ranunculus, Spiræa Japonica, etc.

References as to quality of our Bulbs, etc., to several United States Florists  
and Seedsmen.

Send for Wholesale Catalogue.

**LISSE, NEAR HAARLEM, HOLLAND.**

WHOLESALE ONLY.

NO AGENTS.

**SEEDS, BULBS, PLANTS,**  
**SUPERIOR NORTHERN GROWN.**  
**CURRIE BROS., SEEDSMEN AND FLORISTS.**

Send for Catalogue.

**MILWAUKEE, WIS.**

**RELIABLE SEEDS FOR FLORISTS.**

ZIRNGIEBEL'S Improved White Aster.

—Improved White Perpetual Stock.

—Improved Giant Candytuft.

—Improved Giant Trimandreaux and

Bugnot Fancy Pansies.

Trade packages of any of the above seeds, \$1.00 each.

**DENYS ZIRNGIEBEL, Needham, Mass.**

**TREES SPRING PLANTING.**

We offer the largest and most complete general stock in the U. S. besides many Novelties. Catalogues sent to all regular customers, free.

Fruit & Ornamental. Pothers: No. 1, Fruite, etc.; No. 2, Ornamental Trees, etc., illustrated, etc.; No. 3, Strawberries; No. 4, Wholesale; No. 5, Roses, Free.

**ROSES**

**GRAPE VINES**

**ELLWANGER & BARRY**

MT. ROSE NURSERIES, ROCHESTER, NEW YORK.

**EVERGREENS**

Both native and nursery grown.

Forest Trees and Tree Seeds.

Immense quantity, lowest prices.

Wholesale list, describing all leading varieties, free. It will pay you to send for it.

**HECKE BROS., Seymour, Wis.**

**NEW**

**CHRYSANthemUMS**

It is now generally acknowledged that

I have distributed most of the best new

Chrysanthemums of recent introduction.

I again offer fourteen new varieties of merit, quite distinct from any kinds now in cultivation, as well as all

**BEST OLDER KINDS.**

List ready January 10th.

**H. WATERER,**

IMPORTER OF PLANTS AND BULBS,

56 North 38th Street, PHILADELPHIA, PA.

**WANTED** Every florist to try the

new yellow Carnation

Starlight. See advertisement in another column,

and send for price list of this and other new and standard vars. to Geo. Hancock, Grand Haven, Mich.



## Firing in Zero Weather.

The week ending Jan. 28 of this year, will be long remembered by the florists of many parts of New York State, on account of the bitter cold weather experienced. Some days previous to the 25th the weather had been cold and windy. On that day the wind was south, and during the night considerable dry snow fell. At sunrise of next day the wind changed to the northwest, and the fiercest winter storm experienced in this section set in, and continued for about three days. Thermometer below zero most of the time, wind from thirty to forty miles an hour, snow flying and blinding the eyes of all unfortunate pedestrians, and wherever checked by buildings, etc., piling up in immense drifts. Such weather is not conducive to peace of mind to any poor florist whose houses are not well prepared to withstand such arctic weather, and teaches the lesson to all to have good and sufficient boilers, with ample piping.

A mistake that many make during such bitter weather is to struggle to maintain as high a temperature as usual. Even if but few flowers are cut, it is much better to allow a lower temperature both night and day until calmer weather arrives. It is in the day-time that the mischief is frequently done. During these gales there is generally more or less sun; this combined with the hot pipes will often make the houses 90°. Such high temperature is out of proportion with that of the night, and is sure to do harm to plants receiving it. Yet many allow it hoping by this means to increase the cutting of bloom. Much better not to have the houses over 75° in the day-time, during such cold, windy weather, and the night temperature from 55° to 60°. Reference is made to the houses kept warm. Plants are the better afterwards, even supposing the supply of flowers seems very short.

ALFRED E. WHITTE.

Albany.

## ROSES AND PLANTS.

Before you order what you need, write for my Trade List. I have a large stock of TEAS, H. P. and MOSSER. If you have anything to exchange, name goods, and I will reply if favorable.

E. HIPPARD, YOUNGSTOWN, O.  
The Best Ventilator Apparatus, \$12.00.  
Best Steam Call Bell, \$5.00 to \$10.00.



A. BLANC,

ENGRAVER FOR FLORISTS,

PHILADELPHIA.

ELECTRO OF THIS CUT, \$1.50.

Catalogue of electros of plants, flowers, designs, etc., with 87 and 88 supplements, 35 cts., with vegetable, 50 cts., which deduct from first order.

## CHRYSANTHEMUMS.

I have a fine collection for florists' use, and can sell them my selection at \$3.00 per 100; \$25.00 per 1000.  
Send for Wholesale Price List.

W. W. COLES,  
LANSDOWNE, PA.

## \* CHRYSANTHEMUMS \*

Send for Catalogue of over 100 varieties, including many newer kinds. \$3.00 per 100.

H. L. PHELPS, Springfield, Ill.

## GLADIOLUS.

Mixed and Choice Named Varieties, by the dozen or thousand.

Send for prices; also for Wholesale Price List of

ORNAMENTAL NURSERY STOCK.

SAMUEL C. MOON,

Wholesale Nurseryman and Gladiolus Grower,

MORRISVILLE, BUCKS CO., PA.

## PITTSBURG NURSERIES

(Established 1840.)

We again offer everything Choice and Reliable in

## FRUIT AND ORNAMENTAL TREES,

Small Fruits, New Cherries,  
New Apples, New Quinces, New Pears,  
Novelties in Plants and Seeds,  
Superior Lawn Grass Seed, etc.

Illustrated Catalogue of Seeds, Trees and Plants sent on receipt of 3 cents for postage.

JOHN R. & A. MURDOCH,  
PITTSBURG, PA.

## Surplus Nursery STOCK

## 40,000 EVERGREEN TREES,

10 TO 15 FEET HIGH.

ARBOR VITÆ PYRAMIDALIS,

" HOVEYI,

" GLOBOSA,

" COMPACTA,

" SIBERIAN,

" AMERICAN,

RETINOSPORA DECUSATA,

" PLUMOSA AUREA,

" SQUARROSA,

IRISH JUNIPER, NORWAY SPRUCE,

BIOTA ELEGANTISSIMA AUREA.

18,000 FLOWERING SHRUBS,

2 TO 3 YEARS OLD.

HYDRANGEA PANICULATA; ALTHEA, Common and

Variegated Leaved; WIGELIA, DEUTZIA,

SPIREA, LILAC, ETC., ETC.

15,000 Erie Blackberry Plants.

10,000 Wilson, Jr. Blackberry Plants

8,000 RASPBERRIES—Golden Queen, Rancocas, and

Marlboro.

4,000 CONCORD GRAPE VINES, 2 year olds. Also

many other leading varieties.

The above stock will be quoted low upon application.

We also have a complete line of Fruit, Shade, and Ornamental Trees, Grape Vines, Shrubbery, etc.

22" DESCRIPTIVE CATALOGUE FREE.

C. RIBSAM & SONS.,  
NURSERYMEN, FLORISTS AND SEEDSMEN.

TRENTON, N. J.

## CHICAGO FLORAL COMPANY

Offer the following Chrysanthemums at low prices for the next 30 Days to make room. All good strong pot grown plants, and all true to name.

## Chrysanthemums of

\* 1886. \*

The following list contains Mon. de Reydellet's famous set, together with the best sorts offered by other growers, and should be in every collection.

## JAPANESE.

**Blanc precoce.** Pure white, nicely imbricated, petals raised at first then recurved when fully open. A hardy variety.

**Flocon de Neige.** Thread-like, tube shaped petals, sulcure white changing to pure white. A most beautiful variety.

**M. A. Villorith.** Long thread-like petals, flowers very large, pure snowy white, and should be in every Florist's collection.

**Fellean.** One of the most beautiful Chrysanthemums we have ever seen for cut flower or exhibition purposes, and it should be in every collection. Flowers of immense size and grand form, pure white shaded with cream.

**Wm. Robinson.** Beautiful color of sulphur tinted rose. Greatly admired at the New York Chrysanthemum Show.

**L'ebouriffée.** Petals reflexed, yellow ochre color. A very beautiful color.

**M. Thibaut et Keteleer.** Immense sized flowers, very brilliant rich crimson shaded maroon, and lightly specked with gold, reverse of petals yellow, center petals spiral formed. One of the best of the year.

**Ninus.** Beautiful formed flowers, very pure white with centre of pure straw color. Beautiful for cut flowers or exhibition purposes.

**Le Cygne.** Flowers extremely large and of the most beautiful form, long tube shaped petals, creamy white. One of the best for all purposes.

**Eugene Mezier.** Ananar, reverse of petals Violet and white, very distinct form, petals crinkly like some of the new fringed double Petunias.

**Rosain-Bouchard.** Rose and orange changing to gold color, flowers beautifully formed like the well known variety, "Gloire de Rayonante."

## LARGE FLOWERED.

**La triomphante.** Enormous sized flowers, large imbricated petals, beautiful tint of pale lilac, reflex of petals cream. One of the most beautiful sorts of the year.

**Citron.** Beautiful citron yellow, center or petals flesh color. A most beautiful variety.

**Francis Deberque.** Enormous sized flowers, large imbricated petals, center rose dotted with purple, extremities of petals darker, much resembling the variety, "Reine Marguerite Victoria." A magnificent sort.

**Prince of Orange.** Brilliant yellow shaded and edged with a narrow line of red. Fine.

**Titien.** Magnificent formed, flowers very full, petals beautifully imbricated, violet wine color.

**Gisla.** Violet rose pointed and striped with dark rose color, runcular formed, very distinct in color, and should be in every collection.

## POMPON.

**White Bedder.** White, very early blooming in August, flowers well formed.

**Jane (Snowflake).** The twisted and elegantly arranged petals of this variety render it in our opinion a long way the best and most valuable white single Chrysanthemum yet raised. Awarded two first class certificates in London, England. Beautifully scented. We cut nine blooms off it on New Year's day, 1888.

Price 50 cents each. Included in the former collection, \$6.00 per 100. With many other fine varieties.

**New Fuchasia of 1886.** Fine plants; nothing but the best varieties offered, such as Col. Pomme, the finest double white out; Mon. Thibaut, Redwing, Pres. F. Gunther, Leners, Dr. A. Watelle, Duke of Albany, Luster, Improved, etc. These are all good market varieties.

New Geraniums, New Chrysanthemums, and all the novelties of the season at reasonable prices—\$5.00 per hundred.

## CHICAGO FLORAL CO.

38th Street and Grand Boulevard,

CHICAGO, ILL.

W. G. NEWITT, MANAGER.

No order filled from the list for less than \$5.00. Cash with order.







E wish to call the attention of florists to our stock of young

## \* ROSES \*

—AND—

## \* CARNATIONS. \*

We also offer a large stock of acclimated

## RHODODENDRONS

grown one year in this country and well set with bloom-buds. These plants are in perfect health and condition and will prove satisfactory.

We also have a large stock of Musa Ensete and other desirable plants. Send us a list of your needs and will give you low prices.

**B. A. ELLIOTT CO.,**  
PITTSBURG, PA.

Mention American Florist.

## We offer a Few Hundred of CLEMATIS \* FLAMULA,

Strong plants, two years, at \$10.00, Cash.

**J. H. CAMPBELL & SONS,**

3601 Germantown Ave., PHILADELPHIA, PA.  
Mention American Florist.

**PATENT PLANT RED CLOTH.** Substitute for Glass on Hot Beds, Cold Frames, &c. Protects from frost, promotes sure and early growth. Also used on Greenhouses, &c. Prices, by the piece, 3 cts and 10 cts. per yard. Also all kinds



of Waterproof Covers for Trucks, Wagons, Agr. Implements, Hay-stacks and all farmer purposes. Cheap, strong, durable. Circulars and samples free by mail. U. S. Waterproofing Fibre Co., 56 South Street, New York.

## 20 PLANTS FOR \$1.00.

Send for illus. Catalogue of Collection comprising Abutilons, Begonias, Carnations, Chrysanthemums, Fuchsias, Geraniums, Heliotropes, Smilax, Tuberoses and Gladioluses.

This unrivalled collection all for \$1.00; if by mail, 20 cents extra for postage.

Storn King Fuchsias.....	Per 100
Phenomenal.....	5.00
Rooted cuttings of Storn King.....	5.00

F. E. FASSETT & BRO., Ashland, Ohio.

## SPECIAL LIST.

Carnations, Hinz's White, 2-inch pots.....	Per 100
Geraniums, dble. and sgl., 100 var. 2 1/2-in. pots.....	\$2.00
Roses, American Beauty, 3-inch pots.....	8.00
"Carmen, Perles, Sour, 4-in. and 5-in. Phenomenal.....	6.00
"S. de St. Pierre, The Bride, Sunset.....	6.00
Coleus, 24 varieties.....	2.50
Feverfew, Little Gem.....	2.50

Send for Special Wholesale Price List to Florists only.

**A. GIDDINGS, DANVILLE, ILL.**

Rooted Cuttings of leading sorts Coleus, strong and clean..... Per 100, \$1.25  
Swanley White Violets..... Per 100, \$1.25  
Vine major var., two plants in 3-in. pot..... 6.00  
Tuberosa Bulbs, 4-in. diam. and over, per 1,000, 10.00  
" 3-in. to 4-in. diam..... 8.00  
" sets, clean..... per bu., 3.00  
Begonia Saundersonii, 4-in. pots..... per 100, 10.00  
" Metallic..... 12.00  
" extra..... 10.00  
Achyranthes Emersonii, 2 1/2-in. pots..... 3.00

JOHN CURWEN, JR., Villa Nova, Pa.

## CARNATIONS.

ROOTED CUTTINGS NOW READY.

HINZE'S WHITE, HENDERSON, PRES.  
DEGRAU, PRES. GARFIELD, LA PURITE  
\$1.25 per hundred; \$10.00 per thousand.

**C. B. HUMPHREY,**  
Walesville, Oneida Co., N. Y.  
Mention American Florist.

## \* NEW WHITE CARNATION \*

WM. SWAYNE AND L. L. LAMBORN.

The two best white carnations ever offered. EARLY, FREE AND CONTINUOUS BLOOMERS. Stock of these excellent sorts will be ready March 1st, 1888. Orders booked now, and filled strictly in rotation as received, Price, \$25.00 per 100.

Send for Cut and Descriptive List.

Wholesale price list of rooted cuttings of other leading sorts ready Jan. 1st.

**WILLIAM SWAYNE, Kennett Square, Pa.**

## NEW SEEDLING CARNATION

## \* WHITE GEM. \*

The largest and finest white Carnation ever offered the trade. Strong plants, \$2.00 per dozen; \$15.00 per hundred. READY AFTER MARCH 15th, '88. Send for circular giving full information, to:

**GEO. E. BUXTON, PATTEN & CO.,**  
Nashua, N. H. Lowell, Mass.

**ROSES FOR FORCING.** GROWN FROM THOROUGHLY RIPPENED FIELD-GROWN PLANTS LA FRANCE, MAD. DE WATTEVILLE, SUNSET, PAPA GONTIER, BRIDE, BON SILENE, MAGNA CHARTA, GEN. JACQUEMINOT, AND OTHER POPULAR VARIETIES IN LARGE SUPPLY. SEND US YOUR LISTS AND HAVE THEM PRICED.

SPECIAL QUOTATIONS IN LARGE LOTS.

Address **THE DINGEE & CONARD CO.,**  
ROSE GROWERS, WEST GROVE, PA.

## NEW CARNATIONS

AM. FLORIST and WM. SWAYNE.

"Am. Florist" is a beautiful rose orange, variegated with carmine; large flowers always on long stems, after the style of Grace Wilder; low growing plant and continuous flowering, without budding. "Wm. Swayne," this is the finest commercial winter-flowering white carnation on the market. The petals are of great substance and durability, making it one of the very best blooms to ship long distances; is very large and of the purest white. Strong plants of both varieties from 25-cm. cut at \$3.00 per doz.; \$25.00 per 100. They will be sent by mail at \$3.25 per doz., or one plant of each for 75 cts.

**CHAS. T. STARR, Avondale, Chester Co., Pa.**

## THIS INTERESTS YOU. "STARLIGHT."

The new light yellow CARNATION; clear of stripes or markings; of vigorous growth, early and continuous bloomer; seventy-five per cent. of flowers on long stems, and never bursts its calyx. Try it. Send for price list of Starlight, Wm. Swayne, L. L. Lamborn, Silver Spray and other new and standard varieties to:

**GEO. HANCOCK, Grand Haven, Mich.**

## NEW CARNATIONS.

Orders booked for the two best whites

Wm. SWAYNE, L. L. LAMBORN,  
delivered after March 1st, '88. \$25.00 per 100.  
CUTTINGS.—Hinz's, Henderson and Snowden,  
\$1.50 per 100; \$10.00 per 1,000.

Send for price list of leading Carnations.

**LEROY L. LAMBORN,**

ALLIANCE, Stark Co., OHIO.

## CARNATIONS. ALEGATIERE CARNATIONS.

ROOTED CUTTINGS NOW READY.

Alegatier, Scarlet, \$2.00 per 100. Roundhead, beautiful cherry, \$2.00. Hinz's White, Grace Wilder, Springfield, Snowden and Illudella, \$1.50 per 100. Archduke, beautiful lemon yellow, deeply fringed, \$3.00 per 100. All clean, healthy stock. Address

**H. E. CHITTY,**

Patterson, New Jersey.

## FOR SALE.

—A FINE ASSORTMENT OF—

## BEDDING PLANTS and TUBEROSE BULBS.

Five large flowering Pansy Plants out of seed, \$1.00 per 100, or \$5.00 per 1000. Large triple planted Pansies, \$2.00 per 100.  
Swanley White Violets, large bunches, in bud and bloom at \$2.50 per 100, or will take Carnations in exchange for Violets.

**M. TRITSCHLER & SONS, Nashville, Tenn.**

## PANSIES and COLEUS

BY THE THOUSAND.

PANSIES, from 2-inch pots.....	2.00	Per 100 Per 1000
" transplanted.....	1.50	10.00
COLEUS, including Versicolor and Golden Buzzer.....	2.00	15.00
BEGONIA METALLICA, good plants.....	4.00	20.00

**J. W. DUDLEY & SON, Parkersburg, W. Va.**

## DOUBLE WHITE PETUNIA, MRS. G. DAWSON COLEMAN.

Endorsed by such florists as Deer, Henderson and Halliday, as the finest double white ever produced. Exquisite in shape, pure white in color. For floral work and bedding it has no equal. Mail, five for \$5; eight for \$1.00.

## NEW COLEUS for 1888.

Harry Harold and the Mikado..... } 10 cents each.  
Tokio and Yellow Jacket..... }  
Non-such and Purple Prince..... }  
John Goodie, the Chicago Bedder, doz. 50c; each 10c.  
The set of seven for 60c., two of a kind \$1.00 by mail.

**THOS. G. HAROLD,**  
KINGSTON, Somerset Co., MARYLAND

**FREE SAMPLE.** Every Florist, professional or otherwise, is invited to try "GRAPE DUST" for mildew. On application a sample will be mailed free. Write to

"SLUG SHOT," Fishkill-on-Hudson, N. Y.

## CARNATIONS.

ROOTED CUTTINGS will be furnished to the trade as usual in season.

FLOWERS at all times in quantity.

Send for price list.

**JOSEPH RENARD,**

Successor to THOS. F. SEAL,  
UNIONVILLE, Chester Co., PA.

## CARNATIONS. ROOTED CUTTINGS OF.

Edwardell, Scarlet Gem, Philadelphia Red, Crimson King, Snowden, etc., \$1.25 per 100; \$10.00 per 1,000.  
Portia, Duke of Orange, Chester Pride, etc., \$1.50 per 100; \$12.50 per 1,000.

PLANTS ready March 15th at double the above rates. Pips if desired at one-half these rates. Many other new and desirable sorts. Send for price list and descriptions. Niagara Grape Vines \$10 per 100. W. R. SHELMEIER, Avondale, Chester Co., Pa.

WE OFFER UNTIL MARCH 20

## ROSES, \* VERBENAS.

WE OFFER MERMET, LA FRANCE, HERMOSA, MALMAISON, SOMBRILL, ISABELLA SPRUNT, ETOILE DE LYON, SAGRANO, M. NIEL

And other leading varieties, 3-in. to 6-in. high, strong healthy plants, 2 1/2-in. pots, at \$5 per 100, in assortment.

## VERBENAS

All the best colors, fine, healthy plants, 3-inches to 6-inches high, at \$2.50 per 100; \$20.00 per 1,000.

**F. WALKER & CO.,**  
NEW ALBANY, IND.





## A Refractory Flue.

We have a greenhouse 75 x 17 heated by a flue in the following manner: The furnace is at one end, which branches out into two flues running up one each side of the house. They meet at the far end and connect with the chimney. During cold weather when we have to fire up hard, the furnace end of the house will be very hot, while at the other end we can scarcely keep out the frost. How can we have the flue altered so as to have the temperature more equal throughout the house? We must have the furnace at one end of the house. Is the house too long for a return flue to work with the chimney built on the top of the furnace? Will be glad if you can give us any practical information.

F. B.

[The house is too long for a return flue to work to best advantage. Would advise a heating drum at the chimney as described and illustrated in No. 28, Vol. II of the FLORIST.—ED.]

"FLORIST," in issue for Feb. 1, inquires how many lines of pipe around the house will be necessary to keep a temperature from 50° to 60° at night where outside temperature is 20° below zero, house 40 x 17. With a good means of heating the water, eight lines of 4-inch pipe should be sufficient in such a short house, but a coil of pipe in a furnace used for another purpose is not always satisfactory.

Franklin, Pa.

W. T. BELL.

## \* BARBED GLAZIER \* POINTS.

## FOR SALE IN

BOSTON, MASS. . . . by Wm. J. STEWART,  
67 Bromfield Street.  
PROVIDENCE, R. I. . . . .  
CHICAGO, ILL. . . . . J. C. VAUGHAN,  
146 W. Washington Street.

Retail at 50c. per 1,000. 5,000 will be sent by Express free on receipt of \$2.50. PINEERS, 35c. Each.

## B. B. CHANDLER,

Patentee and Manufacturer.

HYDE PARK, MASS., U. S. A.

## SOMETHING NEW.

## OUR 3-PIECE BOX

For FLORISTS and NURSERYMEN,

Which is the price of the Florists.

ALSO LOCK CORNER BOXES OF ALL SIZES.

Sample and price list free.

SMITH &amp; SMITH,

KENTON, Hardin Co., OHIO.

## THE FLORIDA WEEKLY TIMES.

EIGHT PAGES.

The Best and Cheapest Family Weekly in the South.

Contains the crop of the daily for the week. Only \$1.00 per year; 50c. for six months. A colored Map of Florida free to all yearly subscribers.

LIBERAL PREMIUMS OFFERED.

Send for circulars or sample copies.

## THE FLORIDA FARMER and FRUIT GROWER.

The Great Agricultural Paper of the State.

And unsurpassed in the South. Practical Illustrations in each number, indispensable to every farmer, gardener and fruit grower.

One year \$2.00; six months \$1.00; three months 50c.

Enlarged and form changed to a quarto, convenient in size for binding.

Sample copies of either free to any address.



## FOR THE TRADE. FLORAL WIRE DESIGNS.

JAS. GRIFFITH,

THE PIONEER MANUFACTURER IN THE WEST.

305 Main Street, CINCINNATI, OHIO.

SEND FOR WHOLESALE PRICE LIST.



## GURNEY'S NEW HOT WATER HEATER.

THE CHEAPEST AND BEST FOR Greenhouses, Conservatories and DWELLING HOUSES.

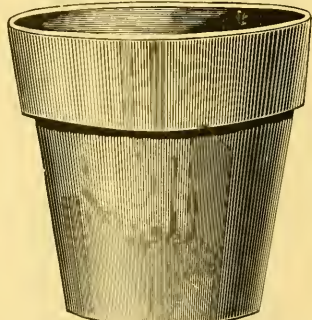
THE GURNEY HEATERS present more water surface to the direct action of the fire than any others (known to us) in use. They are the easiest to keep clean, and with due attention almost any kind of fuel may be used.

EASILY REGULATED. SIMPLE AND EFFICIENT. SAFE AND ECONOMICAL.

Manufactured by the GURNEY HOT WATER HEATER CO., 237 FRANKLIN STREET, BOSTON, MASS.

JOHN A. FISH, Managing Director. SEND FOR PAMPHLET AND PRICE LIST.

SELLING AGENCIES.—M. H. Johnson, 140 Center Street, New York. Rice & Whitacre Manfg. Co., 42 and 44 W. Monroe Street, Chicago (West and Southwest). T. R. Chase, 31 Edmund Place, Detroit, Mich. (for Michigan and Ohio). Wm. Gardner & Co., Portland, Oregon.



THE WHILLDIN POTTERY COMPANY, 713 and 715 Wharton St., PHILADELPHIA, PA.

— USE —

The Improved Rim Pot, AND SAVE ONE-HALF THE BREAKAGE.

Send for Illustrated Price List.

Samples, with sizes marked sent on application.

## SYRACUSE POTTERY.

Thumba.....\$2.54 | Special 3-in. 4.61 | 4 -inch..... 7.91  
2 1/2-inch..... 3.05 | 3 -inch..... 4.78 | 4 1/2-inch.....10.83  
2 3/4-inch..... 3.87 | 3 1/2-inch.....\$6.29 | 5 -inch.....13.75

We ship all over the U. S. Free samples with first order. Order a trial crate. If you send check add 10c. exchange. Send for list of prices and list of prices at which we pack to order assorted sizes in a crate, and for list of 17 ready packed crates. Notice that we sell at the above prices only in

## READY PACKED CRATES

Shipped at buyer's risk and freight; each with order.  
PRICES BY THE CRATE: 3,150 Thumba, \$5.00;  
2,625 2 1/2-inch, \$5.00; 2,000 4-inch, \$4.75;  
1,875 2 3/4-inch, 7.25; 300 4 1/2-inch, 3.30;  
1,300 special 3-in., 6.00; 320 5-inch, 4.40;  
1,150 2 1/2-inch, 5.50; 100 6-inch, 3.50;  
875 3 1/2-inch, 5.50; 1,300 No. 3 Rose, 7.00.

J. N. PERKINS, Manager, Syracuse, N. Y.

## HAND TURNED POTS

From HILFINGER BROS.' POTTERY, FORT EDWARD, N. Y.

PRICES PER HUNDRED

2-in. 40c., 2 1/2-in. 55c., 3-in. 55c., 4-in. 55c., 5-in. \$1.38,  
6-in. \$2.20, 7-in. \$1.00, 8-in. \$6.00, 9-in. \$8.50, 10-in. \$11.50,  
12-in. \$22.50, 14-in. \$30.00. Cylinders for Cut Flowers,  
Box \$1.20, box \$1.50 per doz. We pack in cases which are very strong. No charge for packing. Our pots are well burnt and strong. "TRIPLEX" CAST. Address

HILFINGER BROS., Fort Edward, N. Y.

## HALES' MOLE TRAP

For destroying ground moles in lawns, parks, gardens and cemeteries. The only **PROVE IT** mole trap in existence. Guaranteed to catch moles where all other traps fail. Sold by seedsmen, Agricultural Implement and Hardware dealers, or sent by express on receipt of \$2.00 to H. W. HALES, RIDGEWOOD, N. J.

## D. C. SCHOFIELD,

— MANUFACTURER OF —

## Improved \* Greenhouse

## \* FLOWER POTS \*

NEW BRIGHTON, PA.,

Offers to the Trade the BEST

Quality of Improved Shoulder Pot

in the market at the

LOWEST PRICES EVER OFFERED.

SEND FOR PRICE LIST.

Orders will receive prompt and careful attention and satisfaction is warranted in every respect.

## BOUND VOLUMES OF

THE

## AMERICAN FLORIST

VOLUME II.

Handsomely bound in cloth with leather back and corners, and title lettered on back in gilt, may now be had from this office.

Price, \$2.25.

AMERICAN FLORIST CO.,

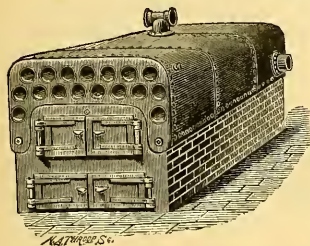
54 LA SALLE ST., CHICAGO.

ESTABLISHED 1854.

## Devine's Boiler Works

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers.



Capacity from 350 to 10,000 feet of four-inch pipe.  
Send for New List.

**PETER DEVINE,**  
387 S. CANAL ST.,  
CHICAGO.

ESTABLISHED, 1866.

Floral Wire Designs,

Manufactured by

**N. STEFFENS,**

335 East 21st Street, - NEW YORK.



## Conservatories

GREENHOUSES, ETC.

Erected in any part of the U. S. or Canada  
Glazed on the

Helliwell Pat. Imperishable System

OR WITH PUTTY.

For further testimonials, illustrated catalogue or  
estimates address

**JOSEPHUS PLENTY.**  
HOFTICULTURAL AND SKYLIGHT WORKS.

Offices, 124 Pearl Street, NEW YORK.

## GREENHOUSE HEATING.

BY A. B. FOWLER.

Explains fully all the best systems of heating  
greenhouses by both hot water and low-pressure  
steam. Tells you the points to consider in selecting  
an apparatus. How to adjust same to various loca-  
tions; gives the results of the latest scientific ex-  
periments. Shows how to compute the number of  
feet of pipe required for a given space; draft and  
other important matters.

It is highly commended by Mr. John Thorpe and  
others. Postpaid, 75c.

Send on receipt of price. Address,  
**AMERICAN FLORIST,**  
CHICAGO.

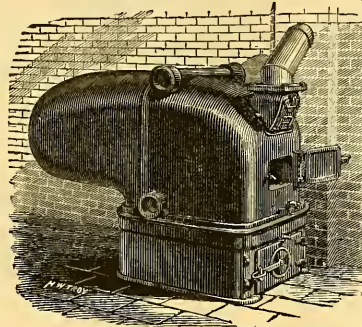
Delegates to the next  
convention will travel  
via the

**Pullman Car Line**  
TO AND FROM  
Louisville, Indianapolis, Cin-  
cinnati and the winter re-  
sorts of Florida and the  
South. For full information  
address



**E. O. McCormick,** Gen. Passenger Ag't, Chicago.

## Greenhouse Heating AND Ventilating

**HITCHINGS & CO.**

233 Mercer Street, New York.

Five Patterns of Boilers,  
Eighteen Sizes,  
Corrugated Fire Box Boilers  
Saddle Boilers,  
Conical Boilers,  
Base Burning Water Heaters

Perfect Sash Raising Apparatus.

Send 4 cents postage for Illustrated Catalogue.

## FLORISTS' PRICE LIST FOR 1888,

FROM

WILLIAM MECHWART,

Terra Cotta Works,

143 TO 147 LIBERTY STREET

CHICAGO, ILL.



2 inch Pots, per doz.	2 1/2 in. wide by 2 1/2 in. high)	\$3.50
3 " " "	3 in. " "	4.00
4 " " "	3 1/2 in. " "	4.50
5 " " "	4 in. " "	5.00
6 " " "	4 1/2 in. " "	5.50
7 " " "	5 in. " "	6.00
8 " " "	5 1/2 in. " "	6.50
9 " " "	6 in. " "	7.00
10 " " "	6 1/2 in. " "	7.50
11 " " "	7 in. " "	8.00
12 " " "	7 1/2 in. " "	8.50
13 " " "	8 in. " "	9.00
14 " " "	8 1/2 in. " "	9.50
15 " " "	9 in. " "	10.00
16 " " "	9 1/2 in. " "	10.50
17 " " "	10 in. " "	11.00
18 " " "	10 1/2 in. " "	11.50
19 " " "	11 in. " "	12.00
20 " " "	11 1/2 in. " "	12.50
21 " " "	12 in. " "	13.00
22 " " "	12 1/2 in. " "	13.50
23 " " "	13 in. " "	14.00
24 " " "	13 1/2 in. " "	14.50
25 " " "	14 in. " "	15.00
26 " " "	14 1/2 in. " "	15.50
27 " " "	15 in. " "	16.00
28 " " "	15 1/2 in. " "	16.50
29 " " "	16 in. " "	17.00
30 " " "	16 1/2 in. " "	17.50
31 " " "	17 in. " "	18.00
32 " " "	17 1/2 in. " "	18.50
33 " " "	18 in. " "	19.00
34 " " "	18 1/2 in. " "	19.50
35 " " "	19 in. " "	20.00
36 " " "	19 1/2 in. " "	20.50
37 " " "	20 in. " "	21.00
38 " " "	20 1/2 in. " "	21.50
39 " " "	21 in. " "	22.00
40 " " "	21 1/2 in. " "	22.50
41 " " "	22 in. " "	23.00
42 " " "	22 1/2 in. " "	23.50
43 " " "	23 in. " "	24.00
44 " " "	23 1/2 in. " "	24.50
45 " " "	24 in. " "	25.00
46 " " "	24 1/2 in. " "	25.50
47 " " "	25 in. " "	26.00
48 " " "	25 1/2 in. " "	26.50
49 " " "	26 in. " "	27.00
50 " " "	26 1/2 in. " "	27.50
51 " " "	27 in. " "	28.00
52 " " "	27 1/2 in. " "	28.50
53 " " "	28 in. " "	29.00
54 " " "	28 1/2 in. " "	29.50
55 " " "	29 in. " "	30.00
56 " " "	29 1/2 in. " "	30.50
57 " " "	30 in. " "	31.00
58 " " "	30 1/2 in. " "	31.50
59 " " "	31 in. " "	32.00
60 " " "	31 1/2 in. " "	32.50
61 " " "	32 in. " "	33.00
62 " " "	32 1/2 in. " "	33.50
63 " " "	33 in. " "	34.00
64 " " "	33 1/2 in. " "	34.50
65 " " "	34 in. " "	35.00
66 " " "	34 1/2 in. " "	35.50
67 " " "	35 in. " "	36.00
68 " " "	35 1/2 in. " "	36.50
69 " " "	36 in. " "	37.00
70 " " "	36 1/2 in. " "	37.50
71 " " "	37 in. " "	38.00
72 " " "	37 1/2 in. " "	38.50
73 " " "	38 in. " "	39.00
74 " " "	38 1/2 in. " "	39.50
75 " " "	39 in. " "	40.00
76 " " "	39 1/2 in. " "	40.50
77 " " "	40 in. " "	41.00
78 " " "	40 1/2 in. " "	41.50
79 " " "	41 in. " "	42.00
80 " " "	41 1/2 in. " "	42.50
81 " " "	42 in. " "	43.00
82 " " "	42 1/2 in. " "	43.50
83 " " "	43 in. " "	44.00
84 " " "	43 1/2 in. " "	44.50
85 " " "	44 in. " "	45.00
86 " " "	44 1/2 in. " "	45.50
87 " " "	45 in. " "	46.00
88 " " "	45 1/2 in. " "	46.50
89 " " "	46 in. " "	47.00
90 " " "	46 1/2 in. " "	47.50
91 " " "	47 in. " "	48.00
92 " " "	47 1/2 in. " "	48.50
93 " " "	48 in. " "	49.00
94 " " "	48 1/2 in. " "	49.50
95 " " "	49 in. " "	50.00
96 " " "	49 1/2 in. " "	50.50
97 " " "	50 in. " "	51.00
98 " " "	50 1/2 in. " "	51.50
99 " " "	51 in. " "	52.00
100 " " "	51 1/2 in. " "	52.50

## CACTUS AND BEGONIA POTS.

4-inch.....	per 100, \$1.00
5 ".....	" 1.50
6 ".....	" 2.00
7 ".....	" 2.50
8 ".....	" 3.00
9 ".....	" 3.50
10 ".....	" 4.00
11 ".....	" 4.50
12 ".....	" 5.00
13 ".....	" 5.50
14 ".....	" 6.00
15 ".....	" 6.50
16 ".....	" 7.00
17 ".....	" 7.50
18 ".....	" 8.00
19 ".....	" 8.50
20 ".....	" 9.00
21 ".....	" 9.50
22 ".....	" 10.00
23 ".....	" 10.50
24 ".....	" 11.00
25 ".....	" 11.50
26 ".....	" 12.00
27 ".....	" 12.50
28 ".....	" 13.00
29 ".....	" 13.50
30 ".....	" 14.00
31 ".....	" 14.50
32 ".....	" 15.00
33 ".....	" 15.50
34 ".....	" 16.00
35 ".....	" 16.50
36 ".....	" 17.00
37 ".....	" 17.50
38 ".....	" 18.00
39 ".....	" 18.50
40 ".....	" 19.00
41 ".....	" 19.50
42 ".....	" 20.00
43 ".....	" 20.50
44 ".....	" 21.00
45 ".....	" 21.50
46 ".....	" 22.00
47 ".....	" 22.50
48 ".....	" 23.00
49 ".....	" 23.50
50 ".....	" 24.00
51 ".....	" 24.50
52 ".....	" 25.00
53 ".....	" 25.50
54 ".....	" 26.00
55 ".....	" 26.50
56 ".....	" 27.00
57 ".....	" 27.50
58 ".....	" 28.00
59 ".....	" 28.50
60 ".....	" 29.00
61 ".....	" 29.50
62 ".....	" 30.00
63 ".....	" 30.50
64 ".....	" 31.00
65 ".....	" 31.50
66 ".....	" 32.00
67 ".....	" 32.50
68 ".....	" 33.00
69 ".....	" 33.50
70 ".....	" 34.00
71 ".....	" 34.50
72 ".....	" 35.00
73 ".....	" 35.50
74 ".....	" 36.00
75 ".....	" 36.50
76 ".....	" 37.00
77 ".....	" 37.50
78 ".....	" 38.00
79 ".....	" 38.50
80 ".....	" 39.00
81 ".....	" 39.50
82 ".....	" 40.00
83 ".....	" 40.50
84 ".....	" 41.00
85 ".....	" 41.50
86 ".....	" 42.00
87 ".....	" 42.50
88 ".....	" 43.00
89 ".....	" 43.50
90 ".....	" 44.00
91 ".....	" 44.50
92 ".....	" 45.00
93 ".....	" 45.50
94 ".....	" 46.00
95 ".....	" 46.50
96 ".....	" 47.00
97 ".....	" 47.50
98 ".....	" 48.00
99 ".....	" 48.50
100 ".....	" 49.00

HANGING BASKETS, DECORATED, 8-in., per doz. \$1.20; 9-in., per doz. \$1.80.  
No charges for packing up to 4-in.; from 5-in. to 15-in. 10 per cent. Cash with  
order, 5 per cent. discount.

## SLATE AND IRON

BENCHES  
FOR GREENHOUSES.

Write for Circular.

**CHAS. S. PRICE,**

LANSDOWNE, PA.

JOHN N. MAY, Summit, N. J.  
SIEBRECHT & WADLEY, New York.  
CRAIG & BRO., Philadelphia, Pa.  
HILL & CO., Richmond, Ind.  
J. C. VAUGHAN, Chicago.

Mention American Florist.

## SASH BARS.

IN EITHER PINE OR CYPRESS.



We carry a large stock in

12, 14 and 16 FOOT LENGTHS,

CLEAR CYPRESS \$2 per 100 ft.  
1st & 2d Cypress \$1.65 " "

## VENTILATORS

Made to Order. Write for  
Estimates.

**JOHN L. DIEZ & CO.,**  
530 N. Halsted St., CHICAGO.

## Ives' Putty Machine.

Patented Jan. 8, 1887.

The best device ever invented for laying putty.  
With this you can make old leaky sash perfectly  
tight without removing the glass. It will do the  
work of five men in bedding glass.

Sent by Express on receipt of price, \$3.00.

**J. H. IVES, DANBURY, CONN.**



## Index to Advertisers.

Advertising Rates, etc.	331
Allen, C. E.	333
Allen, S. L. & Co.	333
Allen, W. S.	331
Bailey, F. A.	334
Bayersdorfer, M. M. & Co.	334
Benard, E. Jr.	329
Benz, Albert	330
Berger, H. H. & Co.	331
Blanc, A.	329
Bonsall, Jos. E.	329
Boyson, Jas. I.	329
Brackenridge & Co.	329
Brown, Robt. S. & Son	327
Brown & Cantfield	327
Burpee, W. A. & Co.	323
Browne, J. G.	328
Butz, Paul & Sons	327
Buxton, Geo. E.	328
Campbell, J. H. & Sons	328
Carmody, J. D.	342
Chandler, B. B.	340
Chesler Floral Co.	334
Chicago Floral Co.	326
Chitty, H. E.	328
Clark Bros.	332
Coles, W. W.	329
Connelly, John J.	324
Cook, J. H.	329
Craze, A. H.	325
Crescapp & Conard Co.	329
Corrie Bros.	331
Carwen, John Jr.	328
Desmond, Wm.	327
De Veer, J. A.	331
Devine, Peter	341
Diez, John L. & Co.	341
Dillon, J. L.	337
Dugges & Conard Co.	329
Dreer, H. A.	329
Dudley, J. W. & Son	328
Elliot, B. A. Co.	328
Ellwanger & Barry	329
Ely Z. De Forest & Co.	332
Exeter Mach. Wks.	342
Fassett, P. E. & Bro.	328
Faxon, M. B. Co.	327
Perry D. M. & Co.	323
Flak & Co.	335
Florida Wkly Times	340
Fulweiler, P. C.	327
Giddings, A.	323
Goldman, M.	323
Goode, John & Co.	334
Greene, W. W. Son & Sayles	340
Griffith, Jas.	327
Griffin, N. S.	327
Growth, Henry J.	323
Gurney Heater Co.	340
Halen, H. W.	340
Hallock, V. H. & Son	323
Halsey, Wm. F.	324
Hammend, Benj.	328
Hammend & Hunter	323
Hancock, Geo. H.	328
Harold, Thos. G.	328
Herr, Albert M.	329
Higley, Henry G.	329
Hilfinger Bros.	340
Hillgard E.	329
Hitchings & Co.	341
Hoffman, H. M.	329
Holznagle & Noel	327
Hocker, H. M.	342
Humphrey, C. B.	328
Hunt, Freeman	329
Hunt, J. H.	341
Johnson & Stokes	323

OTTAWA, ONT.—At the session of the Fruit Growers Association Feb. 8, papers on "Hardy Roses," "Bedding Plants" and "Women in Horticulture" were read in addition to a number of papers on fruit.

## SOMETHING NEW

—IN—

## Heating Apparatus

—FOR—

## GREENHOUSES.

Send for Illustrated Catalogue.

J. D. CARMODY,

EVANSVILLE, IND.

PIPE AND FITTINGS FURNISHED

—TO—

PLANS AND SPECIFICATIONS.

Contracts solicited for

HEATING GREENHOUSES.

Most improved plans.

ALL WORK GUARANTEED.

Prices furnished on application.

E. A. STIMSON &amp; CO.,

No. 22 and 24 Sears Street,

DAYTON, OHIO.



Sectional View.

## IMPROVED BOILERS

FOR HEATING

## GREENHOUSES

GRAPERIES, POULTRY-HOUSES, ETC.

ALSO FOR HEATING

WITH HOT WATER UNDER PRESSURE.

## VENTILATING APPARATUS

For Raising Sashes in Greenhouses.

## GALVANIZED SCREW EYES

And Wire for Trellis Work.

Send for Catalogue.

Thos. W. Weathered,

46 &amp; 48 MARION ST., N. Y.

## Scollay's Valvular Plant Sprinkler.

ALSO THE IMPROVED PUTTY BULB,  
FOR GLAZING GREENHOUSES, ETC.

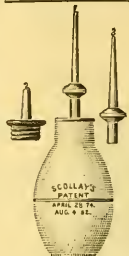
None sold at retail. Buy from your Seedsman.

## PATENT HOT WATER BOILERS,

For Greenhouses, Poultry Houses, Etc., Etc.

JOHN A. SCOLLAY,

74 and 76 Myrtle Ave., Brooklyn, N. Y.



## Improved Hot Water Boilers

For Heating

## Greenhouses, Graperies,

CONSERVATORIES, ETC.

ALSO

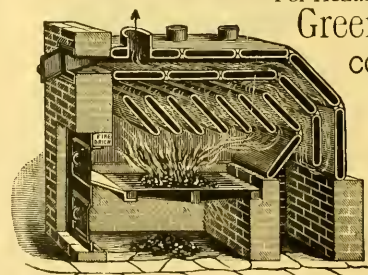
Cast Iron Pipe, Fittings, Valves and  
all Material for Heating by  
Hot Water.

Send for Catalogue.

MYERS &amp; CO.

1173 So. 9th St.,

PHILADELPHIA.



## GREENHOUSE HEATING

BY STEAM, BY HOT WATER, BY COMBINATION STEAM AND WATER.

## EXETER MACHINE WORKS,

19 FEDERAL ST., BOSTON, MASS.

WORKS—EXETER, N. H.

## THE CELEBRATED

## WILKS WATER HEATER!

For Heating

GREENHOUSES,

DWELLINGS,

POULTRY HOUSES,

STORES, BATH TUBS,

ETC., ETC.

Send for Price List.

S. Wilks Mfg. Co.,

Cor. Monroe &amp; Clinton Sts., Chicago



ALL SIZES OF SINGLE AND DOUBLE THICK

## GLASS FOR GREENHOUSES.

ALL GLAZIERS' SUPPLIES.

Write for Latest Prices.

# THE AMERICAN FLORIST



*America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."*

Vol. III.

CHICAGO AND NEW YORK, MARCH 15, 1888.

No. 63.

## THE AMERICAN FLORIST

Copyright, 1887, by American Florist Company.

Entered as Second-class Mail matter.

Published on the 1st and 15th of each month by

THE AMERICAN FLORIST COMPANY.

GENERAL OFFICES, 54 La Salle Street, Chicago.

EASTERN OFFICE,

Room 81, Vanderbilt Building, New York.

All communications should be addressed to the general office at Chicago.

SOCIETY OF AMERICAN FLORISTS.—E. G. Hill, Richmond, Ind., president; John N. May, Summit, N. J., vice-president; M. A. Hunt, Terre Haute, Ind., treasurer; Wm. J. Stewart, 67 Bromfield street, Boston, Mass., secretary. The fourth annual meeting at New York, Aug. 17, 18, 19, 1888.

### Prepare for Easter Trade.

It is not too soon for both the retailer and the grower to make final thoughtful preparation for the flower and plant trade which can reasonably be expected at Easter. The florist-grower should seek his best material early, show samples and solicit orders for delivery at proper time. The beginner is often prone to think he can bring his flowers or plants to market the day, or the day before, they are to be used. Such is rarely the case. The retailer, and even the consumer, wants to know a week or more in advance what he can have—what is coming in—so that if he cannot secure what he really desires, he may provide a good substitute; and the wise grower visits all prospective customers in good season, and not only tells them what he expects to have, but with a busy customer leaves a plainly-written list and approximate prices. The retail florist who does a store trade should, even more than the grower, provide himself with a supply of all the plants his bookshelves have disposed of last year, and not only have good samples early on hand, but secure, if possible, a reserve for increased trade, and if possible some showy stock not sold before, to tempt those who can afford indulgence in Easter luxuries. Mild and sunny weather may bring you a splendid trade, and thoughtful work in season will at least give you your share.

### The Spring Has Come.

Well, how do things look at your place? First rate, only haven't room enough; the houses are chuck full and we are unloading into hotbeds and frames. All right; guess you live in the country. How is it with you brother, who have a city stand, and you, neighbor, whose place is in the suburbs? Just about the same, only more crowded; you see we haven't got room enough at our place; we haven't half room enough for frames

to relieve our houses, and our propagating beds are full and things suffering for want of potting off—no where to put the stuff. Why don't you sell off some of your stuff? Well, you see our sales don't begin till May—April anyway. Does anybody know where your place is? Why yes, we are on one of the main streets, and the people can see the green-houses, and we have a sign up too. Anything else to invite the people to come in? Well, I don't know. Got any plants in bloom outside? No, not much; I don't know that we have anything. You see we cannot get out any bedding plants before the middle of May anyway; well, we did plant some hyacinths and tulips in a bed in front of the greenhouse, but they won't be in bloom till the middle of April. Now, look here, friend; there is no reason on earth why your place should not be a living sheet of flowers at this minute. Don't wait till every man in the business plants out his geranium and carpet beds before you begin to make a show. Your opportunity is right this moment, when your neighbors' gardens are as bare of blossoms as is the turnpike road. Have your front yard—the space between your green-houses and the street—nicely even, clean and tidy, your fence in good fix, your gate in working order, and the roads or pathways leading into your place high and dry, evened off round and without ruts—all this for good and prosperous appearance sake. And have any amount of flowers—crocuses, snowdrops, Siberian squills, bulbocodiums, daffodils, erythroniums, periwinkle, moss pink, white arabis, blood root, spring adonis, crown anemones and others of the host of available early spring blossoms. If you haven't got these you can procure them in quantity for very little money. And many of them are very easily gotten up from seed. Don't stint the supply at all; use them lavishly, the bulbs broadcast over your whole yard if you wish, and use them indiscriminately and tastefully and always where they can be displayed to the best advantage and speak the loudest in favor of your good taste.

All the people have gardening on the brain right now; they are digging and grubbing and sodding and pruning, and they are hungry and thirsty for stock and information. They buy a few roses and bedding plants every year and sow a few seeds. That's perennial routine. And yet they do not experience that soul-stirring love—watching for the earliest blossom. Then please wake up and make love to them. They don't care about spring flowers, because they don't know anything at all about them. Now, for the good of the community, for your own business welfare, speak to the people now—speak to them through the trumpets of ten thousand flowers. Then every lady in the town must see your flowers,

and seeing how they grow and bloom year after year with barely any care, must have a part of them at home. And thus shall go forth your name and praise, and your tender plants are sold as well as hardy ones shall be sold, and you shall have a full mouth's start of your less enterprising or more indifferent brethren. You cannot overdo this business. The more the people get the more they want, and the more successful they are in cultivating their plants the more insatiable become their demands for a greater variety. Let your works go forth before the people that they will get talking about your place and be almost compelled to come to see it; let your place be one of the sights of the town. Everybody who has been pent up all winter long is eager to get out now that it is spring, and as your place is the prettiest around, where better can they go than there? Some florists speak to the people through their catalogues, and we all know that's a mighty expensive way of talking. But the local florists can let their blossoms speak for them.

WM. FALCONER.

### Timely Hints.

At this season of the year the care of young plants after being taken from the cutting bench is very important. I need hardly say that they should have care and attention at all seasons, but now that the sun is getting fiercely hot, any neglect is dearly paid for. I make it a practice to see that all plants are thoroughly watered as soon as potted—not drenched, but watered sufficiently to nicely wet the whole soil. For at least four or five days they are shaded with paper immediately the sun's rays strikes them until after four o'clock or as long as the sun shines on them. If this is followed out but few plants will get sun-sick or fog off. I have frequently seen, where no shading has been given, at least one-third either crippled or dead. While on this subject, I wish to say that shading from the direct rays of the sun is one of the most important factors in propagating—I mean when the cuttings are put in to root. During the early part of last year most of you will remember in the AM. FLORIST there were some who advocated striking cuttings in the sun. This plan may have been successful, but as it is diametrically opposed to all the tenets of nature, I for one should be sorry to attempt it—for what does a cutting represent? Simply a scrap of suspended vegetation. A cutting exposed to the sun for even a few minutes, immediately begins to die or withers from evaporation. When we are successful in propagating it is when the slightest possible amount of evaporation occurs. To prevent this we must have an atmosphere charged with more moisture than the



cutting actually has in itself, otherwise the cutting is lost in at least a few days. The whole secret of propagating is, have the balance on the right side.

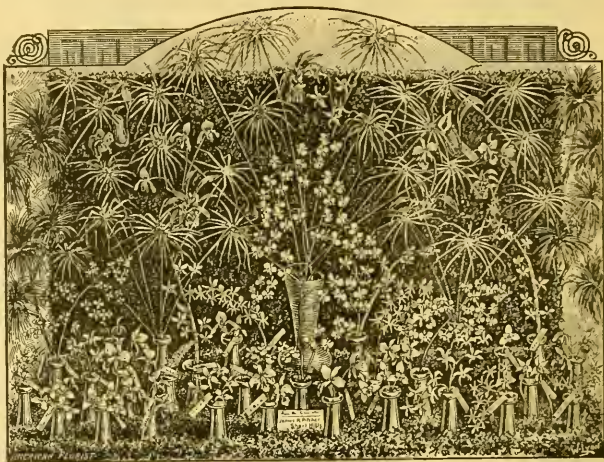
**Fungus in Cutting Benches.**—In my new undertaking I have found some difficulties, owing to the fact of being strange to the position and general adaptability of the houses, and for the first time in ten years the cutting bench fungus has troubled me somewhat. During the last week it occurred to me to try what effect the washing compound pearline, being a strong alkali, would have upon the fungus. About three table spoonfuls were dissolved in a quart of boiling water, to which was added three quarts more of cold, making one gallon. The cuttings were watered thoroughly and repeated. This seemingly destroyed all traces of the enemy, and I shall continue to use it.

**Crude Oil for Scale.**—Among other novelties I found some H. P. roses in pots literally covered with scale. A plant of Anna de Diesbach in an 8 inch pot was literally white with the little pests, so with a brush I painted the plant from top to bottom, allowing considerable of the oil to run into the ball, not caring whether the plant was killed or not. Every scale was killed, and the plant is now as bright as possible. On Sunday I turned out the plant to see whether the oil had injured the roots, but to my astonishment, the plant was not only not injured, but the roots were as healthy as any roots I ever saw.

JOHN THORPE.

#### New York Notes and Comments.

The closing days of the orchid show brought out a lot of new attractions. Owing to its success, the exhibition was prolonged four days beyond the time originally set for its close. Mr. Jas. Comley gardener to Mrs. F. B. Mayes, Lexington, Mass., displayed the finest specimen of *Cologyne cristata* ever exhibited; it completely filled an oblong jardiniere five feet long by two wide, and was a very vigorous variety. It attracted a great deal of admiration. Mr. Comley also displayed a new seedling rose. It was a bright carmine, a sort of compromise between a Jacqueminot and a Bon Silene, something the same shape as a Cusin. It is claimed that the color becomes brighter after cutting, instead of fading to a dull purple, like most high-colored roses. The foliage is robust, and it is said to be a freer bloomer than Bon Silene. This rose is so far unnamed. Mr. Comley will be remembered as the exhibitor of a new rose at the first orchid show, a very robust pink hybrid tea. Other later additions to the show were a beautiful specimen of *Cattleya Trianae* from Rose Hill, having twenty-five open flowers, and the first *Laelia purpurata* of the season from Mr. Kimball's collection. Mr. May showed some fine roses, beautiful Brides and Bennetts especially, and some excellent mignonette. The first intention was to display nothing but orchids, but the duration of the show caused quite a dearth of available flowers, so others were added to prevent any vacancies. People who derived their horticultural information from the daily papers came to the show primed with a good many singular facts. One lady wanted to see the "Dude orchid," which she had been reading about in a morning contemporary. The florist addressed, whose name must be "Truthful James," took her over to an anthurium and told her that the resemblance was



MR. JAMES R. PITCHER'S EXHIBIT AT THE NEW YORK ORCHID SHOW.

seen in the shadow cast by the flower. It was a little bit of a novelty to see *Odontoglossum grande* labeled "Baby orchid," though one could see the aforesaid infant with a sharp pair of eyes and a little imagination. A pretty little fountain of perfume was arranged in the first hall. It was gracefully surrounded by plants and a bit of grotto work just in front of the assortment of wax sovereigns. There is one thing which might be added to most flower shows, and that is a conspicuously emblazoned copy of the eighth commandment, for the benefit of those botanical kleptomaniacs who are in the habit of helping themselves to the exhibits. The people who come to flower shows may be regarded, as a rule, as possessing taste and refinement, because it is an entertainment which certainly appeals to these qualities. And yet at most shows some of the flowers are pretty sure to disappear. Some of Mr. Comley's new roses were abstracted in this way at the late show here; whether it was a mere flower lover or a person envious of cuttings remains to be seen. One kleptomaniac of the latter variety busied himself at some of the chrysanthemum shows, and was actually heard to boast that he had all the best varieties and never bought one of them. Then there are some women, I regret to say, who seem very hazy as to the law of meum and tuum when applied to flowers, as most florists learn to their cost. They are apt to want souvenirs of a show, and if they can't gather in a flower they are likely to snip off a leaf, without any regard to the plant's feelings. But of course they would never recognize their failing under the eighth commandment.

One big decoration at the opening of the Lenten season was a silver wedding and german. There were curtains of smilax caught up with bunches of roses, and a charming effect was produced on a mantelpiece by vases of Beauty roses and *Lilium Harrisii* on a bed of Dutch hyacinths and tulips strewn loosely over the mantel. An immense Japanese fan was embroidered and clustered with small

knots of choice flowers and suspended on a large mirror. A cabinet mantel of the newer style, which lends itself readily to decorative effects, was adorned with asparagus and masses of orchids. Throughout the entire house were groups of handsome palms.

There is certainly some prospect that the trade in palms and ferns will be much larger next winter than in the past, so long-headed dealers are preparing for it. One out-of-town grower is about starting 15,000 seedling palms. People are sensibly using these plants more and more in decorations, the effect is so much handsomer than of flowers alone. And there is the prospect that by and by people will use a *latania* or some such general utility palm in their front windows instead of the unspeakably awful artificial plants one so often sees.

All the trade catalogues seem more fully illustrated than usual this year, but it is a little amusing to see in one of them a very evident picture of the Puritan labeled the Bride. Perhaps the printer is the responsible party in this case. By the way, the printer makes me allude to *Cattleya Trianae carminea* in the last issue, when, like Mrs. Harris, "there ain't no sich person." It should have read *Corningii*.

Judging from the advance sheets of the premium list, the Philadelphians are going to have a most charming exhibition of spring flowers in April. It is a sort of show that is sure to take, because every one loves the first flowers of the season. We might feel the least touch of envy if it were not for the glory of the orchid show, though the latter was the result of individual energy instead of being the work of an organization.

Advertisers who go in largely for the mail trade are offering seeds of a palm under the title of *filifera*, which is to be germinated and grown as easily as a geranium. It is presumably a *Brahea* from the Pacific coast, which is really very readily grown.

EMILY LOUISE TAPLIN.



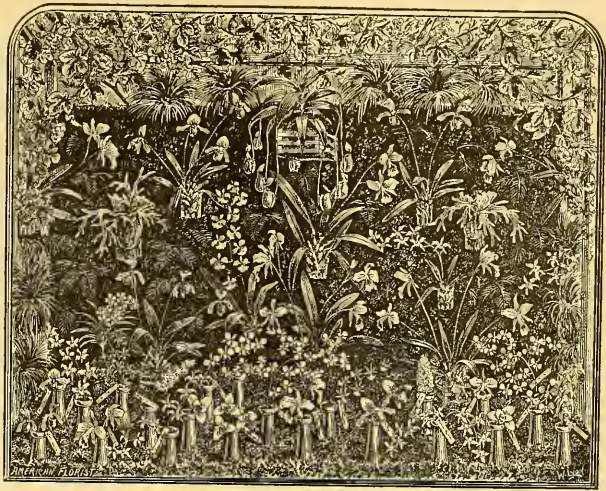
### Why Buy Whistles so Dearly?

The suggestion offered by Mr. Falconer in the *FLORIST*, that some method should be adopted to certify the approval of competent judges as to the relative merits of new varieties of plants, is worthy of the consideration of all. In the same number it was suggested that this work be incorporated in some way with that of the S. A. F.

It is safe to assert that there is no expense incurred by florists so frequently useless than that of buying new plants. Probably one-half of the newer varieties of florists' flowers sent out are no better than many of those that have been grown for years. There is no way of testing their merits except by the experiment of growing them. This must necessarily be a costly one, but the cost would not be burdensome if the variety only equaled the description. When is this the case? So seldom that the exception is the rule. No doubt some will say: "The buying of new roses, carnations, etc., for the purpose of growing the plants in order to dispose of the flowers in open market, is purely a speculation, and if you are bitten you have no right to complain." Granted. Nevertheless, if there is any means whereby we who suffer can agitate this subject so that some plan may be devised likely to be of benefit, it is perhaps the part of wisdom to try it.

Practical observation has demonstrated that no money is ever made by those florists who are dependent upon the sale of cut flowers for a living, in the buying of high-priced new varieties to be grown solely with a view to the production of bloom. If the variety is good, the expense is of secondary consideration, for stock is obtained perhaps at a somewhat cheaper rate than if the grower waited until the following year, when prices naturally would be lower. But when the contrary is the case, the money spent in the purchase is as good as thrown away. We will all be only too glad to buy anything superior to what we possess. Better, however, to cling to an old friend than discard it for one whose merit is unknown, no matter how pretentious its appearance. To illustrate: This spring we have four new varieties of white carnations advertised for sale, all of them professing to be "the best white carnation ever offered." This is a great deal to say. There are some good varieties of carnations, possessing qualities of rare merit, which have been grown and tested and have given satisfaction. Are we to believe that all these four are superior to anything we now have? Are the four of equal merit, or is there one superior to the others? If so, which is it? "Oh," say some, "buy the lot and try them." All right; those that wish to can do so.

No one can satisfactorily determine the desirable qualities of a new flower by simply buying a dozen or two. There must be a bunch of them in order to become thoroughly acquainted with its merits or demerits. But if these carnations are better than anything we now have, we want them, and all would be willing to discard old varieties to make room for them. There may be some that have seen these new carnations growing at the raiser's houses, and have by these means become acquainted with the merits of these claimants to our favor. Those, however, who have not had this privilege of observation will perhaps find it advisable to wait for a year; by that time we shall know if these white carnations are really superior to any now upon our benches.



AN ARRANGEMENT BY SIEBRECHT & WADLEY AT THEIR RECENT ORCHID SHOW

It is a mistake for the possessor of a new plant of merit to rush it upon the market with a limited stock and at a high price. If the plant is desirable and is really better than others of the kind, grow it for a few years, and every one will hear of it, and every one will want it—that is, if it is properly advertised. Not only so, but by possessing a large stock the price can be placed within the reach of all. When roses are sold from 2½-inch pots for \$1 each, and carnations of like size for 25 cents each, any man may be absolutely sure that by purchasing at this price no profit can be derived from the sale of the flowers.

There is a committee appointed by the S. A. F. to examine into the relative values of insecticides. Why could not a committee be authorized by the society to determine the merits of the many new plants raised every year? A certificate of merit granted by such a committee would not only be of great advantage to the buyer, but would also materially aid the seller in placing his stock upon the market, besides tending to banish worthless rubbish. ALFRED E. WHITTLE.

### Quality.

There is no subject of greater moment to the trade at the present time than that of the quality of the cut flowers produced for market. It is of equal importance to the grower, the wholesaler and the retail dealer. There was a time, some years ago, when a bouquet was a bouquet, a basket of flowers was a basket of flowers, and the composition of the basket or the bouquet was a matter of but secondary consequence, excepting that it was frequently stipulated that it should have "plenty of rosebuds in it."

How different the situation now is, any one connected with a retail flower store well knows. It is not among the customers of the fashionable city stores alone that the great change has taken place, but in the country towns and the

smallest stores even, the demand for best quality has become almost universal. Indeed, many of the customers nowadays recognize varieties of roses almost as readily as the florist does, so that substitution even is getting to be risky business. Then the roses must be perfect in shape and uniform in size, the color must be up to highest standard, the stems must be so long and so straight, and every leaf must be as free from spot or bluish as the flower itself. Pale Mermets, purple Bennetts, stemless Niels find no friends to-day—no, not even among those plebeians who patronize the street peddlers. Scant of funds these people may be, and their investments in such luxuries as flowers may be few and far between, but they are one and all on the alert for wired buds, cologued violets and rubbish generally, and promptly turn up their noses at anything but the best. The holiday reports published recently in the *FLORIST* from various cities in this country were very suggestive. Note how uniformly the story comes from every quarter: "Demand for baskets falling off." "Designs uncalled for." "Trade in loose cut flowers increased." In fact, the tendency in buying flowers now is to have them in such shape that every point may be criticized, and absolute perfection is demanded in every detail of petal, twig and leaf.

And how do the wholesalers fare? Do they not find their florist customers demanding twelve perfect flowers to every dozen, and refusing to accept ninety-eight good flowers and three or four inferior ones as a full hundred? It is not the retailer's fault that he insists on having something he can sell. The wholesale dealer or commission man, for equally good reasons, is obliged to follow suit. A wholesaler cannot transform inferior into first-class stock, and he can supply at goods only when the producers supply him with that quality. The growers might as well make up their minds to submit to this discrimination,



for it is simply inevitable, and those who are careless regarding the quality and condition of the goods they send to market will have to take the consequences. Two or three or half a dozen small pieces of smilax twisted and tied together are no longer accepted as one salable string. Bunches of carnations with the wrinkled ones and the burst ones carefully hidden in the middle are "back numbers," and on account of the presence of a few imperfect blooms, the goods are condemned and good and bad are lost together. There is but one way out of it. In order that you may get any adequate return for your investment, time and labor, send only the good flowers to market. But if you must send inferior ones also, always send them separately and mark them second quality; then what is good in your stock will, as a rule, bring a satisfactory price, and you will get the merited credit for what you do well. If first-class flowers are sent to market, they will generally sell for something, no matter how dull the condition of trade may be, while poor stock can scarcely be disposed of at any price, even in time of great demand.

This was not the case a few years ago, but it is positively true now. The discussions in the Society of American Florists and other organizations regarding the methods to be pursued and the errors to be avoided in order to insure flowers of best quality to intelligent growers, come not a day too soon. Let it be accepted as a cold fact by our flower growers, that mildewed *Bon Silenes*, bull-headed *Perles*, straw-colored *Mermets*, blue *Jacqs*, burst and wrinkled carnations, stained callas, sickly lily of the valley and abortive tulips are rubbish and nothing else, and the best place for them is the rubbish heap. When we consider that probably not twenty per cent. of the roses grown for market in this country are first-class or up to the standard required by the average run of customers, it is surely high time for those engaged in producing roses to wake up and make every effort by personal attention and study, and by heeding the experience of others, to produce goods of first quality or to discover the cause of their failure. The man who has the best of anything to offer is the one who will always be sought after; his goods will sell before any other; they will bring the best price, and he will find his reputation preceding him wherever he goes.

W. J. S.

#### The Cyclamen.

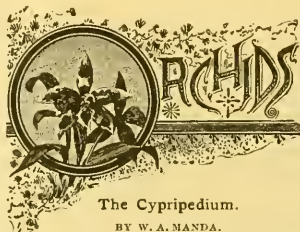
I often wonder that florists who depend largely on the sale of pot plants do not more generally cultivate the cyclamen, in fact every florist should grow them. They are easily grown and will always sell; the flowers last a long time either cut or on the plant; it is invaluable for the window garden, and a dish filled with the plants when in bloom will form a centre-piece for the dinner table that would be hard to beat. Mr. E. A. Seidwitz, of Annapolis, Md., is one of the crack cyclamen growers in this section, and a brief outline of his cultural methods may not be amiss. Seed is sown any time from August to December, and the seedlings when fit to handle are transplanted into thumb pots or shallow boxes; from this time until the plants have set their buds, is what Mr. Seidwitz terms the difficult period in cyclamen culture, the great object being to keep the plants in a state of constant

vegetation, re-potting as soon as the plants show signs of becoming pot-bound, maintaining a moist atmosphere by syringing, etc., and airing when weather will permit, in order to keep the plants stocky. In fall when the buds have set, the plants are removed to a cool house, anything like forcing being carefully avoided. In potting Mr. S. uses a good rich, light soil, and considers that cyclamens should be grown to perfection from seed in one year; when a longer time is required, it is owing entirely to negligent treatment.

There is one point in cyclamen culture on which I probably differ from many of my brethren. I refer to drying off the bulbs. It is the custom with some growers as soon as the plants are done flowering, to gradually reduce the water supply, ultimately withholding water altogether, and in this condition the plants remain until it is again time to start them. This treatment may not be so general as formerly, but it is still adhered to by some florists, and I am convinced from practical experiment and careful observation, that it is a mistake. The practice really injures the plant and the necessary rest can very easily be given without leaving the plant for months to bake and shrivel up, as is too often the case.

Baltimore.

A. W. M.



The Cypripedium.

BY W. A. MANDA.

XL.

This genus was well represented at the last orchid show given by Messrs. Siebrecht & Wadley at the Eden Musee, New York city. All the species, hybrids and varieties that bloom this time of year were well represented, and the quality of the flowers was all that could be desired. Mr. Corning of Albany and Mr. Kimball of Rochester were the principal exhibitors in this class. Had it not been that Mr. Pitcher had lost all his flowers by smoke, he too would have made a grand showing. As a rule, there were mostly cut flowers shown. Among the most attractive were a noble spike of *C. Morganii*, bearing three large flowers—*aspecial variety*; the true *C. Harrisianum* var. *superbum*, and a new variety of the same variety called *C. Harrisianum vivicans*. The old *C. insigne* was represented by the type, the varieties *Maulei*, *mosaicum* and another unnamed one with bold broad flower densely spotted in the dorsal sepal. Such kinds as *C. Boxallii* and *Boxallii atratum*, and several varieties of *C. villosum*, also *C. Lowii* and *C. Haynaldianum*, were shown in several specimens, besides the old *C. venustum* and the fine variety *spectabile*. Noteworthy was a fine variety of *C. purpuratum* called Kimball's variety, and an extraordinarily fine *C. nitens*. There were numerous specimens of *C. Harrisianum*, some with two flowers on a spike, also specimens of *C. Leeannum superbum*, *C. Lawrenceanum*, *C. callosum*, and many curious hybrids such as *C. meirax*, *C. Williamsianum*, *C. politum*, *C. chloro-*

*neurum*, *C. Sallieri* and *C. Crossianum*. *C. barbatum* was represented along with the varieties *Warneri* and *biflorum*, the odd *C. Bullenianum*, the showy *C. selligerum*, also the beautiful *C. Spicerianum* and the spotted *C. argus*.

The gem of the selenipediums was certainly the *S. Lindleyanum*. What *C. Fairieum* is to the cypripeds so is this little beauty to the selenipeds. There was a fine spike of *S. grande*, the chaste *S. Sedeni candidulum*, the bright *S. cardinale* and the beautiful *S. Domini*, along with several spikes of *S. longifolium* and *S. Roelzii*. The whole show was a success, the cypripeds attracting as much attention as anything else. I hope it will not be very long before I will have the pleasure of reporting a special cypripedium show.

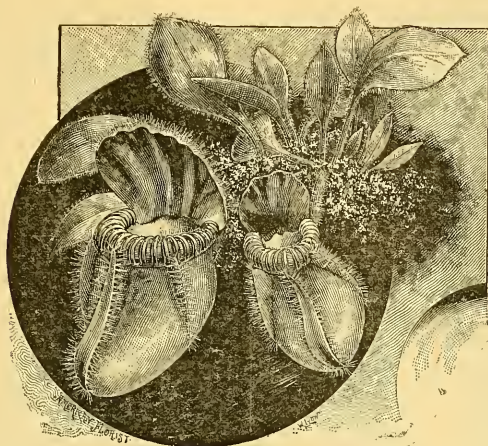
Botanic Gardens, Cambridge, Mass.

#### Among the Carnation and Rose Growers of Chester County, Pa.

A trip through what is sometimes called "the carnation belt" is always interesting and instructive. Wm. Swayne was the first grower Robert Craig and the writer called upon. He has made a specialty of growing carnations for some years. His plants have a very different appearance from what are generally grown in the immediate vicinity of Philadelphia, the latter article making a more sappy growth than the Chester county product.

There is much speculative talk amongst the craft as to the cause of the Chester county plants producing more and better flowers when they are most needed than Philadelphia plants do. Some say it is in the soil, others think the location may have something to do with it. It is seldom the grower gets much credit. It must be a combination of circumstances and skill. Mr. Swayne says that he frequently sees much larger plants in the fall at lifting time in other sections of the country than his own are. Perhaps this is the secret. Is it not a question of ripening of the growth? In many other plants it is. Why not in the carnation? If this is the case—and I am inclined to think there is something in it—we could make an attempt to produce plants the growth of which had a tendency to ripeness, by planting in a somewhat dry and not too rich soil, or in naturally moist locations they could be planted on ridges, where they could stand high and dry during the growing season.

Most of the standard sorts are grown here. A table of *Buttercup* was certainly a magnificent sight. The flowers were large, perfect in shape, and there were lots of them. Mr. Craig said more than once: "Buttercup is the best carnation ever sent out." The appearance of it here on this occasion certainly justified the remark. They were being held on the plants longer than usual, to fill an order at Buffalo, where they would play an important part in the floral decorations of a golden wedding jubilee. "Portia" and "E. G. Hill," as scarlets, are favorites here. The new varieties, which Mr. Swayne will distribute soon, claimed our attention. "L. L. Lamborn" and "Wm. Swayne" are both white; "Pride of Kennett" is crimson. The latter is a good shaped flower, with smooth petals, and does not burst its calyx. L. L. Lamborn is a dwarf variety and the individual flower is larger, and the best formed, but the plant does not produce so many of them as the "Swayne." The flowers of the latter have more substance, consequently will ship better. When handling



CEPHALOTUS FOLLICULARIS.

AN AUSTRALIAN PITCHER PLANT SHOWN AT THE RECENT ORCHID SHOW.

a lot of the flowers they actually *rattle*, reminding us of autumn leaves. This is a characteristic possessed, so far as I know, by no other variety. Some varieties do better in different localities than others, but the present indications are that Swayne will be the best for the grower and dealer generally.

Edward Swayne, who has been in the business longer than his relative, William, joined us, and a drive of a few miles brought us to the veteran carnation grower, Chas. T. Starr. We had not time to look through Edward Swayne's place. It is reported that he has a white seedling very little inferior to William's. Mr. Starr raised several of our most popular varieties of carnations, notably Buttercup and Century. He has other new ones on trial, some on the "Grace Wilder" order, but they are not in bloom. One named "Erminie" Mr. Starr expects to give a good account of itself. It is a pink variety, similar in shade to Grace Fardon, but much larger. He has a new one called "American Florist," which is an improved "Sunset." The flower is a better shape and the shadings of color are brighter. If it proves to be as vigorous in constitution as the older sort, it will be an acquisition. Seawan, an old sort with crimson flowers, opens better with Mr. Starr than it does with Mr. Swayne. The number of varieties grown here is unusually large, many of them being the fancy sorts, which are grown to fill orders from his large amateur catalogue trade.

We next called at the Dingee & Conard Co.'s rose establishment, which is a model in order, neatness and thorough system. They have upwards of sixty houses, and the young plants which are on hand for the approaching season's sales are in excellent health; plants could not be in better health, and present a brighter appearance than the West Grove roses do. The firm of Dingee & Conard Co. was the pioneer in this line of trade, and it is estimated that they are still doing the largest amateur trade in the country. They have hit upon a happy plan of renovating or rejuvenating their stock, by sending early in the

spring young healthy plants to the Carolinas (I forget whether North or South), where they have a long season of growth, and such varieties as La France, Geant des Battles and others, which make but short growth comparatively in one season at the North, throw up luxuriant canes in the South, which is astonishing, but which is just what is needed for propagating purposes.

It is a treat to see the rapidity with which work in the various departments is put through. In the making of cuttings, after they are taken from the plant they pass through two operators' hands before they are ready for the propagating bed. One cuts them the proper length, and the other trims the leaves. The sand used for propagating purposes is very coarse, and light in color. One man seems to put cuttings in as fast as three can make them. The bed is carefully marked off the proper distances, and the cuttings are dibbled in, which perhaps, taking everything into consideration, is the quickest way.

The uniform kindness and hospitality which we received at the hands of Messrs. Edward and Wm. Swayne, Chas. T. Starr and Antoine Wintzer, Benj. Connell, and G. H. Leahy of the Dingee & Conard Co., are held in grateful remembrance.

EDWIN LONSDALE.

#### Second Annual Meeting Indiana Florists.

The Society of Indiana Florists met in second annual convention in the Horticultural rooms, new State House, Indianapolis, Feb. 22-23. The attendance was very satisfactory. Besides prominent florists from all parts of the state, there were present Henry Michel of St. Louis and Charles Taylor of New Brighton, Pa. J. D. Carmody, the president, opened the meeting, urging the florists to lay aside all jealousies and combine for mutual protection and benefit. The exhibition committee reported a balance of \$155 over all expenses. It was decided to hold another show in November, and the following committee was appointed:

Fred. Dörner, chairman; M. A. Hunt, D. W. Cox, E. G. Hill, Wm. G. Bertermann, W. H. Lawrence and W. H. H. Hoss. This committee will meet at La Fayette some time this month. The following essays were read: "Chrysanthemum Culture," Mr. Fred. Dörner; "The Most Profitable Roses," E. G. Hill; "Why I Grow Flowers," W. H. Lawrence; "The Cost of Raising Cut Flowers," M. A. Hunt. A committee of two was appointed to visit Purdue University—a state agricultural college—to inquire into the horticultural department, especially as to floriculture. Mr. and Mrs. Allen Lloyd of this city were elected honorary members. The following officers were elected for the following year: President, J. D. Carmody; Vice-president, Fred. Dörner; Secretary, Wm. G. Bertermann; Asst. Secretary, John Hartze; Treasurer, Anthony Wiegand; Executive Committee—E. G. Hill, Henry Hilker, J. C. Hehl, D. W. Cox, G. W. Doswell. The secretary was instructed to write to every senator and congressman in this state to vote in favor of reducing postage on seeds, bulbs and cions. J. D. Carmody, as vice-president for this state, was requested to secure suitable hotel accommodations for the Indiana delegation to the national convention in New York. Full proceedings of the convention will be published in the State Board of Agriculture Report, which will be issued in May.

The banquet on the evening of the 22d was a most enjoyable affair, J. D. Carmody acting as toast-master. The future of the national society was answered to by M. A. Hunt, the past and present of the national society by E. G. Hill, the state society by J. D. Carmody, the pioneers in the florist's business by Allen Lloyd, two well-chosen songs by Fred. Dörner, Washington's birthday by W. A. Carr, the seed business by W. H. H. Hoss, the benefits of hail insurance by E. G. Hill, and the amateurs by W. H. Lawrence.

The convention adjourned about noon on the 23d of February, to meet again one year hence. There was quite a display of plants and cut flowers in the adjoining room—some very fine florets of Wm. Swayne's new white carnations, L. L. Lamborn and Wm. Swayne. Some fine carnations were also exhibited by Chas. T. Starr—twelve or more valuable varieties; some elegant Puritans and Papa Gontiers by Evans, Philadelphia, and some orchids by Siebrecht & Wadley; some excellent Bennetts, La France, Niphotos and Papa Gontiers by M. A. Hunt; some excellent specimen blooms of Meteor and Primrose Dame by Hill & Co., and other plants and flowers by local florists.

W. B.

#### Philadelphia.

C. H. Grigg of the defunct firm of C. H. Grigg & Co., and more recently of the firm of Graham & Grigg, called a meeting of creditors of the old firm a short time ago. After some parleying, 35 cents on the dollar was accepted in settlement of about \$5,000 of indebtedness. A rumor is afloat to the effect that Mr. Grigg will again embark in the florist's business and tempt Dame Fortune once more.

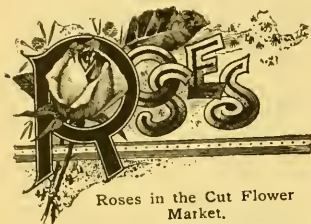
Business fell flat as soon as Lent came in. Flowers are plentiful. Tulips, lily of the valley, daffodils and good roses are to be seen at many of the street corners on Chestnut street. This has a tendency to demoralize business at the stores. What can be done to stop it?



Would a flower market have the desired effect? We think not, unless every grower who sends in his flowers to Philadelphia agreed to send all his flowers to the market, and then an additional agreement entered into not to sell to the street fakir.

Mr. Peter Ball of Malden, Mass., was in Philadelphia last week.

Carnation "Mrs. Cleveland" is *not* a seedling from "Grace Wilder," as stated in the last issue of the FLORIST. It is the result of a cross between P. Henderson and Grace Wilder, the latter being the pollen parent. E. L.



Roses in the Cut Flower Market.

What is the trouble with the roses? Having never grown a rose under glass, the writer acknowledges entire ignorance and disclaims in advance any intention of attempting to answer the above question himself. But it does not require the eye of an expert to see that there is certainly a very big screw loose somewhere. Examining with admiration and wonder a magnificent bloom of the Bennett rose, the other day, I could not but think of the well-worn proverb so often heard, that "what has been done once can be done again." The bud referred to was a grand specimen. It was two and one-half inches long, of the brightest color, solid and heavy, with a stem about two feet in length, strong and well furnished with luxuriant foliage. If we could only have such roses in the market regularly and in quantity, how they would sell! And one cannot refrain from asking the question, "Why can we not have them?"

I recall a visit to Mr. Evans' rose houses in Philadelphia, at the time he held exclusive possession of the Bennett. I believe it was the year previous to the time this variety was put on the market. I remember seeing him come out of the Bennett house with a whole armful of the buds on stems of about fifteen to eighteen inches in length; and I also recall the sensation of regret at seeing him rip off all the buds at the top joint and then deliberately cast the bundle of luxuriant stems into the fire. Those blooms were cut from the original imported bushes, and we see at the present time a few solitary specimens of like beauty; but the vast majority of the Bennetts cut for the market—well, there is no need to describe them, they are well known. And what is the trouble?

A young man with little or no experience puts up a range of rose houses, buys his stock wherever he can get it cheapest, and goes at it haphazard, just as he would undertake to raise lettuce or cucumbers; and how does he succeed? Ten chances to one he comes up smiling, with the finest roses in the market, eclipsing everything in sight. But after a year or two trouble begins; his stock refuses to respond to the customary treatment, his conceit vanishes with his good luck, and he is finally lost sight of among the rest of his co-laborers. Fresh ones however will take his place, every time. Not a season

comes 'round but some new beginner swoops down upon the market with roses that for quality almost take our breath away.

It has come to be the custom with a certain class of highly experienced gardeners of the old school, in the sunshine of whose presence the rarest orchids and stove plants fairly revel, and from whose finger tips flows a subtle power which seems to cover the tenderest pets of the tropics with verdure and bloom, to look rather disdainfully upon the accomplishments of the man who knows nothing and talks nothing except the cultivation of that common and easily managed old plant, the rose. But it now begins to look to some of us as though it requires about as much brains and persistent study to turn out a uniform crop of Bennetts, Perles and Beauties suitable for the market, as to handle successfully a varied collection of anything else, orchids not excepted. Is there a rose grower in this country to-day who can plant his house with any marketable variety of roses and affirm positively that he is sure to score a certain success in quality and quantity of bloom from the same? I doubt it. It is very suggestive, pathetic and amusing too, to see the statement in the FLORIST recently that certain rose growers of experience actually talk seriously of going a hundred miles and more to procure some of the magic soil of Nyack which has been credited, perhaps rightly, possibly erroneously, with elevating suddenly the rose growers of that favored locality to the top of the ladder. And if it should prove that in this soil really lies the long sought for relief, what a veritable gold mine the precious spot will become.

Time is a great leveller. As the prices of cut roses steadily falls from one year to another so the risks and chances of those employed in producing the roses increase. New diseases, hitherto unheard-of insects are being added every season to the already too long list of pests. The narrow margins between the cost of securing a doubtful crop and the prices realized for the same on an overstocked and uncertain market is getting narrower and narrower. The prices must soon stop falling or the pests stop advancing, else there will be serious trouble in the camp before many years. This is the situation as seen by an

OUTSIDER.

#### Rose Mrs. John Laing for Early Forcing.

My attention has just been called to the description of this rose as given in Mr. John N. May's trade list for 1888. He says of it: "Of this variety very much was expected as an early forcer. So far it has not been realized, but I think it is of enough merit to warrant a further trial." With all due respect to Mr. May as an expert rose grower, I would say that as yet he does not fully appreciate the merits of Mrs. John Laing. Further I would say, that no hybrid rose extant can be so readily and profitably forced for flowers in the early winter. These statements are based on actual experience: I planted out a bench of Mrs. John Laing for early forcing and they were pruned and tied down Sept. 17 last; they were in bloom Nov. 23, and we continued cutting flowers until Jan. 6, 1888. The bench was 3 feet by 145 feet and from it we cut 2,000 blooms. Can any one give me any data where more blooms were produced from any other hybrid rose occupying that amount of space and blooming at that season of the year.

Philadelphia. CHAS. F. EVANS.

#### Blind Wood Cuttings and Bull-Heads.

It is the opinion of many growers that if cuttings are taken from blind wood, or from wood that has produced a "bull-head" or malformed flower, that the young plants will not bloom freely or will produce poor flowers, on the principle that like begets like, but I have proved to my satisfaction that such is not the case.

It was merely through an accident that I demonstrated the blind wood question. In 1883 I had a Perle bud which was much deeper in color than any that had come under my notice, I put in four cutting from the same shoot, and the following year they were grown on a bench alongside my other Perles. I found they threw just as much blind wood and as many malformed flowers as any of the others. That winter, 1884-'85, I rooted fifty Perles selected from the very finest flowering wood, fifty from the worst lot of bull-heads I could find, and fifty from blind wood; it was all nice clean wood, therefore they rooted and grew along without any perceptible difference. The following year they were planted side by side, and I can safely say there was not a particle of difference in them; one lot had just as many malformed flowers and blind wood as the other.

I hope my friends will not misunderstand me in regards to blind wood, I would select nothing but healthy, strong wood; and no matter if it be blind or otherwise the result in flowering will be the same. I would advise anyone not to put in the poor miserable brush-wood that is too often done when we are short of wood; better sacrifice a few hundred rosebuds if you want a quantity of nice young plants. This time of the year we can generally root from 95 to 98 per cent, if the wood is good and clean, but if we put in everything, we are likely to lose 50 per cent., besides many dying after being potted off.

Considerable difference of opinion exists as to the cause of malformed flowers of the Perle. To my mind there are several causes: Wherever we see Perles growing very strong and rank we see a good percentage of bull heads. Less strong breeding will overcome this. Again, cool treatment will be found beneficial, and I really think that a high temperature is one of the principal causes of malformed flowers. The soil also has its influence; in a very strong growing soil the evil is quite noticeable. At my old place in Claymont fully 25 per cent. of all the Perles I cut were malformed flowers. The plants that I forced here last winter were from the same stock and not 5 per cent. of the flowers were deformed. Lausdowne, Pa. W. W. COLES.

#### Fungus from Manure.

In the early part of May, 1886, we as usual prepared our rose soil so as to have it ready for use by the middle of June, the soil and manure being laid in separate heaps from the previous September and October. At the time stated above we began to fill our benches and plant as soon as each house was ready, our stock being in fine condition, in 4-inch pots eight to twelve inches high, but to my surprise, after having been planted some four or five weeks, the roses still showed no signs of making new growth; this I could not account for as they had been well taken care of. On examining the soil I found considerable fungus and later on in September and October I found the fungus had spread from one end of the house to the other





FLORAL WORK AT THE HAMBURG (GERMANY) EXHIBITION IN SEPTEMBER, 1887

and down to the bottoms of the benches, and of course on the roots of the roses. A great many of the roots were entirely killed and as of course the plants would not grow while in this condition, we pulled up the worst of the plants and replanted with good stock again, taking out the soil of a space about 12 inches in diameter each time and filling the hole with new soil, but with no better results as that also was soon full of fungus and the plants turned yellow and kept dying out all through the winter. There were a few not so badly affected as the others but they never entirely recovered.

The cause of this trouble was mixed manures; horse, mule and cow manure

all thrown into one heap together although at the time of mixing the soil we could not detect one from the other, as the manure was two years old. The reason why we are sure that the manure bred the fungus is that three back benches were filled with soil without manure, and these grew as well as we could wish. We tried several supposed remedies to kill the fungus in the soil but failed to find any that would not kill the plants. Salt is an excellent thing to kill fungus, but the quantity it would take to kill it in the benches would also kill the plants. The following spring I had a lot of young roses in 3-inch pots, the roots of which were also affected; I washed the roots in

clean water, and then in soot water—one quart of soot to a pail of water—and found it a complete remedy, as they were never affected afterwards. S. C.

COMTESSE DE FRIGNEUSE.—Mr. H. E. Chitty, Paterson, N. J., jumps on this rose with both feet. He says it is utterly worthless.

Floral Work at Hamburg Exhibition.

The accompanying illustrations show four specimens of floral arrangements at an exhibition in Hamburg, Germany, last September; the engravings being reproduced from Moller's *Deutsche Garten Zeitung*.



The basket in upper left-hand sketch was filled with a groundwork of tea roses and clusters of begonia flowers over which were laid fronds of *Adiantum gracillimum*; on the handle was fastened a bouquet of the same flowers with the addition of some spikes of bloom of oculilums.

The horseshoe was filled with Ten week's stocks on which was a handsome bouquet of gloxinias in various shades, surrounded by fine grasses, ferns, sprays of spiræa, etc. Two bows of ribbon and a cluster of the currant-fruited tomato added considerable to the effect.

The dark groundwork in the fan was of dark scabiosas, on which was laid a garland of La France roses, *Lilium auratum*, rose buds and grasses. The curve formed by the ground of the dark scabiosas was edged with white flowers of the same species, which was in turn bordered by clusters of flowers of *Clethra arborea* with a background of isoplepis.

The oval basket shown in lower right-hand sketch was filled entirely with white flowers such as eucharis, stephanotis, tuberoses, white lapagerias and roses intermixed with *adiantum* fronds and a few cissus vines.

Lapageria blooms have lately come into great favor in Hamburg owing to the increase in their culture. The *clethra* flowers used in the floral fan were used in many pieces owing to their gracefulness, resembling the lily of the valley; with their bell-shaped flowers in loose clusters they can be used with excellent effect in any floral work, and as older trees give a large supply, a good stock of strong plants (which if grown as standards are also exceedingly attractive as plants) will repay the florist a good profit.

#### Odds and Ends.

"It doesn't pay the small dealer to grow azaleas," said one of that ilk to me lately, and, in a certain sense I agree with the gentleman. It is unprofitable for the large and small dealer alike, to grow any plant to which they cannot, or will not, give the necessary care and attention. I have seen many a nice little batch of azaleas so sadly neglected that the owner could not possibly find them otherwise than unprofitable; but the florist who can afford room for a few azaleas, and will give them the little care necessary, will find them a valuable addition to his stock. The treatment requisite to keep azaleas in good condition is very simple, but must be attended to in proper season. Large plants will get along for two or three years very nicely without being repotted; if necessary they may have a slight top dressing, but should always have occasional applications of liquid manure during the season. Small plants must be repotted as soon after blooming as possible, at the same time remove all weak and useless wood; give the plants plenty of drainage and use a soil consisting of about two-parts peat or leaf mould and one-part good loam with a good dressing of sand. When potted give them a temperature of 60° to 65°, syringing freely at least once a day, give air in fine weather, and when the plants have made their growth, harden off gradually until removed outdoors, when they should be plunged to the rim of the pot either in the ground or in decayed hops, ashes, etc. Some florists keep their azaleas during summer in some shaded position, others plunge them where they will be fully exposed to the sun, and for my own part I prefer the latter plan.

I was shown to-day half a dozen blooms of Puritan, which I fear tempted me to

break the tenth commandment, inasmuch as I sincerely envied the grower and coveted the skill and cunning which enabled him to bend the austere Puritan to his will with such pleasing results. I have suffered defeat in all my attempts to bring this rose to anything approaching perfection, and like many other florists I have been tempted to dub the Puritan as no good; but there is certainly enough in the rose, from what I have seen, to make it worth the growing. The fact that it succeeds with others convinces me that my own treatment of the rose has been erroneous, and it may be that other growers might attribute much of their failure to the same cause.

A few years ago, I was advised to plant out my calla lilies instead of laying them on their sides to rest during summer. I tried the method, and was so well satisfied that I have adhered to it ever since. The custom of resting callas still obtains with some, but I think if they will give above plan a trial they will be pleased with the result. Select a well-enriched piece of ground in some shady spot, and having divided the plants as may be necessary, plant at such distance apart as size of plants will warrant. They make a splendid, strong growth treated in this way, and yield a large crop of flowers. They should be taken up and potted in September, being careful not to give too much pot room. When performing this operation for myself I don't object if the roots have to be helped into the pot a little. Better have the pot a little small than otherwise.

A meeting of influential citizens was held here recently to petition the Park Commissioners for the establishment of a botanic garden in Patterson Park. It is proposed to locate the gardens on what is known as the park extension, but as the proposed site will have to be drained and put into shape generally before anything can be done with it, the commissioners have decided to withhold their decision until the necessary improvements have been accomplished.

Baltimore.

A. W. M.

#### Plant Diseases.

Perhaps there is sufficient analogy between plant life and human life to justify the assertion that conditions which are known to be unfavorable to the latter may be, in some cases, equally unfavorable to the former. If men are crowded into unventilated rooms for many hours each day their health will suffer. If the crowding is carried to excess they will die, as in the famous Black Hole of Calcutta.

Our greenhouses, when well built, are practically air tight, and during the winter are crowded with plants which for fifteen or eighteen hours a day have no ventilation. This fact is enough to justify any amount of disease. Out-of-doors plants are saturated with dew during the night, in the house the opposite of this takes place, and the moisture in the air is violently abstracted on cold nights and deposited upon the glass in the form of frost. This is another unnatural condition; and the sudden change from a hot atmosphere saturated with moisture to a much colder and dryer one must be injurious to the plants.

In tropical forests, where vegetation reaches its greatest development, the tops of the trees are exposed to the full heat of a powerful sun while the roots are kept comparatively cool by the dense shade. In our greenhouses the exact opposite takes place, the greatest heat rising up

from the bottom, while a few feet above the plants there is for many hours of the day, and frequently all day, a curtain of ice. Our plants out-of-doors all suffer more or less during the long, hot days of summer. This is because the soil becomes superheated by the sun's rays, the air at the surface quivering with heat as above a hot stove. In tropical countries, where trees are scattered permitting the sun's rays to strike the earth, the growth becomes stunted. This unfavorable condition is imitated in our houses whenever pipes are placed under benches.

Why should bottom heat which is so unfavorable to plant growth outside be favorable inside? In short, it seems as if we violated every natural condition of growth. It is not necessary that plants should be exposed continuously, or long at a time, to the unnatural conditions in order that their health should suffer. Five minutes' imprudent exposure has sent many a man to his grave, and our plants are frequently exposed during the winter to shocks that would try the constitution of the hardest man. It is a curious fact that since greenhouses were invented there has been no change in the general method of management. We have improved apparatus and that is all. We still continue to apply heat at the bottom of the house and air at the top in solid blocks, and it is just possible that this method is as bad as can be. Theory is squarely against it, and theory and practice are very good friends.

All our methods under glass are exactly opposite to nature's. If men were exposed in an unprotected state to the same conditions as our plants the result would be lung diseases of every kind. Pneumonia and consumption would sweep them off by thousands. Is it not possible that our diseased plants are suffering from some form of lung trouble? Consumption in fact, may become hereditary in some cases, as in the Degraw carnations. We are so accustomed to the present state of affairs that we do not notice its strangeness. With the thermometer outside at zero the situation inside is certainly very curious. We have volumes of air at a high temperature rising from the bottom of the house, while the bitter winter's cold is kept out by a thin curtain of ice and glass from which volumes of cold air continually fall to meet the rising hot air, and the plants occupy the battleground between them. It is a wonder that any survive.

Of the thousands of florists in the country but very few, comparatively, succeed in growing really good flowers. The conditions of growth under glass must be very adverse indeed when failure is so general and persistent. It seems possible to radically change these adverse conditions; by heating from above the plants instead of below them; by admitting air continually, night and day, through minute crevices, leaving the usual ventilators for the warm months; by preventing the sudden condensation of moisture by double glazing or some other method, by maintaining a higher night temperature. There is no objection to heat in itself at night, the objection is to dry heat without air; by ventilating at night and preventing so much condensation a high temperature would be an advantage. Plants are all right during our hot summer nights out of doors when they have plenty of air and are covered with dew. If we can contrive any way to get the dew on plants under glass, instead of having it on the glass, we will find the process of raising good flowers very much simplified.

It is possible that we build too cheaply and that it would be for our interest to spend more money and more labor in protecting our plants during the long winter nights. Rolling shutters can be used outside, and double glazing with single thick glass. Surely there must be some way of controlling unfavorable conditions. If it can be shown conclusively that present methods are wrong it will not be long before new ones are thought out. L. W.

#### L. Candidum—What Ails Them?

On the 24th of November last I planted 500 bulbs of *L. candidum* in a bed on the ground of one of my greenhouses. The bed was composed of good rich loam and rotted sods to the depth of about one foot. The temperature of the house was kept at 50° to 65°. In due time all began to start, apparently equally well, and continued so till they had grown from six to eight inches in height, when the leaves showed a peculiar appearance of being glued together at the tips, and in a few days the growing end entirely rotted. This appearance was seen on about half of the lot, mixed all through the bed, while the rest are growing as finely as could be desired. The closest examination failed to show any insect at work on the injured ones, and I am at a loss to assign a reason. Can any reader of the *FLORIST* give a cause and name a remedy? The affected bulbs are now (March 1) apparently as strongly rooted as those not so affected, and the foliage formed before being blighted is as fresh and bright as the unblighted ones at their sides. INQUIRER.

[From the date of planting we are inclined to believe the bulbs were weakened by keeping them out of the ground so long. We think *candidum* should be planted in September.—ED.]

#### Short Notes.

THAT MEXICAN ROSE.—L. V., in the *Boston Transcript* says: "The mystic flower that opens in the morning white as snow, looks upward at the noonday sun rose-tinted, and when the evening shadows fall is red as blood."

THE DUTCH BULB TRADE.—Mr. J. J. Van Waveren, interviewed by the *St. Louis Republican*, says of Dutch bulbs that more than 500,000 people are engaged in this industry in Holland, and that the annual sale is about two million dollars, of which America uses about one-tenth.

VIOLET SWANLEY WHITE.—We have tried growing this in different ways, but have had best success here with our ordinary soil, keeping them cool with plenty of air. One bed, in which we mixed mortar, clay, sand and well-rotted manure, failed completely.

Nashville, Tenn.

T. & SONS.

LEAVES IN ART.—Mr. Benn Pitman, in a lecture before the Cincinnati Art School, gave a very instructive lecture showing the primitive and historical use of leaves in art and architectural designs. The acanthus he calls the most general decorative type adopted by early nations. These, with forms of flowers for art uses, are fully illustrated in the *Cincinnati Gazette* of Feb. 19 and 20.

CANNA PRINCESS DE LUSIGNAN.—This has been introduced this year by Mr. Crozy of Lyon, France. It is a dwarf

variety, with large dark green leaves, and large compact flowers with rounded petals of a brilliant red. The *Journal des Roses* considers it a superb variety. Antoine Chantini, Jules Chretien, General de Nigrier, and La Guille are also favorably mentioned as extra large flowering varieties of decided merit.

FREESIAS FROM SEED.—Mr. F. A. Baller of Bloomington, Ill., sends us specimens of freesia blooms from seed sown last August, saying: "I have not heard of any being raised from seed, and flowering first year and maturing first-class bulbs at the same time, as they have with me. I find them very tractable—just as easy to grow, bloom and have in succession as hyacinths. I have had them from Christmas; I will probably have a succession till open weather. You will notice there is quite a variation in the bloom, some being snow-white and others with yellow and orange markings."

DAFFODIL, ARD RICH.—In regard to this daffodil Mr. E. M. Wood of Newton, Mass., says: "I planted Ard Rich on Nov. 1 alongside of Trumpet major. They were both above ground Jan. 1, the Ard Rich a little in advance. The Ard Rich was in flower Jan. 31, the Trumpet major Feb. 25. I consider this variety fully equal to the major in color, better in shape—the elegant fringe giving this new daffodil a very graceful appearance. It is equally large in flower, and of as fine substance. I have no doubt it will supersede the old Trumpet major as soon as it can be procured at a paying price." Mr. Thos. Tapper, Canton Junction, Mass., states that he finds Ard Rich to be fourteen or fifteen days earlier than Trumpet major, and in his opinion far superior to it.

#### Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1887.

March 16—Tem., morning 24°, noon 37°, evening 29°. Wind W. to NW. Potted rooted cuttings of alyssums and gnaphaliums and plunged in hotbed. Trimmed and plunged *Thymus argentea*. Potted rooted cuttings of coleus, and placed in bench a fresh batch of cuttings. Laid eight sashes of hotbeds for alternantheras.

17—Tem. 30, 34, 29. NW. Laid another eight sashes of hotbed for alternantheras. Repotted Mt. of Snow geraniums into 3-inch pots.

18—Tem. 24, 33, 29. N. to NE. Pricked out in boxes seedling celosias. Shaded upper front part of palm house with lath shades. Took inside fresh potting soil.

19—Tem. 30, 35, 33. N. Repotted petunias into 4-inch pots. Continued pricking out seedling celosias.

20—Tem. 30, 40, 34. WNW. to SE. Sunday.

21—Tem. 33, 38, 33. N. to NE. Potted rooted cuttings of pileas—two in a 2½-inch pot—and plunged in hotbed. Repotted heliotropes, petunias and begonias.

22—Tem. 29, 36, 29. NW. to N. Finished potting of pileas and repotting heliotropes, and plunged them in hotbed. Commenced dividing, potting and plunging alternantheras in hotbeds. Propagated a fresh batch of coleus.

23—Tem. 26, 45, 43. S. to SW. Continued dividing, potting and plunging alternantheras. Repotted stocks into 4-inch pots and plunged in cold frame. Finished propagating coleus.

24—Tem. 40, 39, 40. SW. to E. to NW. Same as yesterday, and planted daisies

in cold frame. Cleaned manure from tulip beds. Potted rooted coleus cuttings.

25—Tem. 26, 40, 31. NW. Same as yesterday, and laid twelve more sashes of hotbed for alternantheras.

26—Tem. 29, 36, 32. NE. Same as yesterday, and sowed seed in boxes of phlox, gomphrena, dianthus and datura.

27—Tem. 32, 32, 28. NE. Sunday.

28—Tem. 14, 29, 22. NW. Potted rooted coleus cuttings. Finished repotting Mt. of Snow geraniums. Repotted maurandias into 3 and 4-inch pots. Cleaned frame yard of snow.

29—Tem. 14, 26, 22. NW. Continued potting rooted coleus cuttings. Repotted fuchsias. Pricked out in boxes seedling torenias, and in pans tuberous begonias.

30—Tem. 24, 35, 30. SE. to E. Repotted old geraniums into 5-inch pots. Pricked out in boxes torenias, vincas and petunias. Trimmed Virginia creeper on north side of houses.

31—Tem. 30, 45, 40. E. to W. Same as yesterday, and continued dividing, potting and plunging in hotbeds alternantheras. Potted and plunged *Verbena hybrida*. Potted rooted coleus cuttings.

#### News Notes.

CHARLESTON, S. C., will have a rose show early in April.

THEO. RUDOLPH, a florist of Seacaucus, N. J., committed suicide Feb. 23.

WELLSBORO, PA.—Whiting has built a new cut flower house 110 x 20, heated by steam.

MONTREAL.—The Gardeners' and Florists' Club held an interesting meeting Feb. 14.

PITTSBURG.—Jno. R. & A. Murdoch are using natural gas for fuel in their greenhouses.

GRAND HAVEN, MICH.—Mr. Geo. Hancock's houses just completed, gives him a total of 20,000 feet of glass.

LOUISVILLE.—Haupt & Epping succeeded Haupt Bros. & Epping, the elder Haupt having withdrawn from the firm.

LOUISVILLE, KY.—Edward McNally, from Anchorage, Ky., and claiming to be a florist, was arrested upon a charge of larceny.

ATCHISON, KAN.—The sad news reaches us of the death of Mr. E. C. Schweim's wife, which occurred Feb. 26. Four small children are left.

GRAND RAPIDS, MICH.—F. A. Chapman has sold his store business to Townsend & Cherryman, and will devote himself exclusively to growing.

WHEELING, W. VA.—Mr. Theo. Schreiber, the well-known florist, died March 4. His nephew, Mr. F. Laupp, will remain in management of the business.

MEMPHIS, TENN.—C. Denman, the new proprietor of the Memphis Floral Co. has considerably improved the condition of the place since he took hold of it.

MORTON GROVE, ILL.—Mailander & Poehlman have dissolved. Mr. Poehlman continues, and Mr. Mailander is now with Mr. H. Schiller of Niles Center.

THE SUNDAY attendance at the New York orchid show was large—many of them wage earners—says the *New York World*. Twenty-five cents was the admission fee.



ST. LOUIS.—J. S. Wilson & Co. have been attached and sold out at auction. The business is now run in the name of Wilson & Co., with J. S. Wilson as manager.

THE DES MOINES, IA., florists propose holding a plant and cut flower exhibition about July 15. They have also agreed on a uniform scale of retail prices for greenhouse plants.

THE MONTREAL *Star* suggests that the Royal conservatories and gardens grow flowers for the sick in the public hospitals as well as for the satisfaction of the pleasure-seeker.

NEW ORLEANS.—Chas. Ebbe has succeeded E. Baker who failed last December. He will continue at the old stand—4 Camp street. R. Maitre will remove April 1 to 140 Canal street.

BOSTON.—Feb. 18 Mr. Robt. Farquhar read an interesting paper on "Bulb Gardens of Holland," before the Mass. Hort. society. By the way, it would pay every American florist to become a member of this best organization in America and obtain its reports. Robert Manning, secretary of Boston, can tell you how reasonable the membership fees are.

MORRISVILLE, PA.—James M. Moon, youngest of the Moon brothers, who are extensively engaged in the nursery and florist business, met with a serious loss by fire on the afternoon of the 27th ult. His dwelling house was entirely consumed with nearly all the contents. It was a new house built last winter, to which he took his bride about a year ago. They had been from home for a short time, and were expecting to return the next day.

NEW ORLEANS.—Mardi Gras was celebrated this year in a floral way, nineteen tableaux of floral subjects being represented. They were: 1. Rex, King of Spring. 2. Spring. 3. The Daisy. 4. Violets. 5. Honeysuckle. 6. Sunflowers. 7. Cornflowers. 8. Lily of the Valley. 9. The Rose. 10. Pond Lily. 11. Forget-me-not. 12. Calla Lily. 13. Golden Rod. 14. Easter Lilies. 15. Convulvulus. 16. Ferns. 17. Asters. 18. Tulips. 19. Fairies at Home.

MINNEAPOLIS AND ST. PAUL.—Business has not been as brisk this winter as was expected at the beginning of the season. Some florists complain that there has been a falling off of twenty-five per cent. in the volume of business done from that of last year. All kinds of bulbous flowers have been very plentiful, almost all the growers having apparently laid in a very heavy stock of bulbs last fall. Their orders for next fall are liable to be less than last. Some very good azaleas, Hartsii lilies and cinerarias are to be seen in the florists' stores. Owing to much dark weather this winter, roses have not produced a very heavy crop. There is some talk to the effect that the Oakland cemetery, of St. Paul, will build an elegant conservatory to cost about \$10,000. No wood will be used in its construction. AUG. S. S.

CINCINNATI, O.—B. P. Critchell & Co. sued the John H. McGowan Pump Co. for \$1,500 damages. It is alleged that the defendant furnished a pump to supply a boiler in a greenhouse with water. The pump failed to work as represented it would, and consequently the boiler was destroyed, steam could not be supplied to heat the greenhouse, and many flowers were frozen during the past winter. The loss in flowers is alleged to

have been \$1,000, and the loss by the destruction of the boiler \$500. Hence the suit. Wm. Stichtenoth of Clifton is building four houses, each 25 x 100, for roses only. *The Enquirer* says that one of the enterprising florists here who saw fit to solicit funeral work was checked in his career by the promise of a black eye from a hoped for customer.

### SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order.

**SITUATION WANTED**—By a thorough rose and cut flower grower, 15 years' experience, best of references. Address M. A., care Am. Florist.

**SITUATION WANTED**—By a practical gardener and florist; competent in all his branches. Private or commercial. Married; wife first-class French cook. Good references. Address C. M. M., Athens, Bradford Co., Pa.

**SITUATION WANTED**—By gardener, 14 years' experience; thorough practical knowledge of all branches of gardening; 7 years as foreman and second man in commercial greenhouses. Married. Best of references. Address Box 701 Batavia, Ill.

**SITUATION WANTED**—By a competent florist, being in the trade for the last 20 years, 6 years in this country; good propagator. Address A. F. M., care S. Schneider, 185 E. New York St., Indianapolis, Ind.

**SITUATION WANTED**—As gardener, either private or commercial—latter preferred. Good references. 25 years' experience; thoroughly understands growing all kinds of flowers, fruits and vegetables, outside and under glass. Address Box 412, Scranton, Pa.

**SITUATION WANTED**—By a gardener of experience, sober and industrious, in either private or commercial place; experienced in rose growing and propagating, and can furnish good recommendations. Address B. R., care W. J. Stewart, 67 Broad St., Boston, Mass.

**SITUATION WANTED**—By a competent German florist, single, 34, in a catalogue establishment; a competent grower of roses for both purposes, hard and soft wood grower and propagator; understand the filling and putting up orders for shipment; commercial place preferred. Address SUMMIT, care American Florist, Chicago.

**SITUATION WANTED**—By a competent German landscape gardener and florist, to lay out a place or take charge of a park or private residence; reference of ability first-class. Address W. B. Sanders & Bencke, Nurserymen, 1201 Olive St., St. Louis, Mo., or Martin, Gillet & Co., Baltimore, Md.

**SITUATION WANTED**—By a first-class young florist, Danish, single, industrious, honest, active, reliable, sober and intelligent; understand all branches of horticulture and floriculture; rose and carnation grower and general stock; fine taste in making up floral designs and arranging flowers for decoration; also understand bookkeeping; best references; commercial place preferred; only those wanting first-class man need apply. Address R. S. RASMUSSEN, Y. M. C. A., Watertown, N. Y.

**CATALOGUES** of nurserymen, seedsmen and florists wanted. Address W. B. LITTON, Franklin, Tenn.

**WANTED**—Second-hand greenhouse boiler and pipe, also water tank. Address, stating size and price, A. ROSBACH, Pemberton, N. J.

**WANTED**—Florist to have general charge of all greenhouses; violet and carnations for bloom a specialty; cottage furnished. DUTCHES NURSERY, Longneeklee, N. Y.

**WANTED**—Young florist of six years' experience wishes to invest \$2,000 in some paying branch of the florist business. Address J. L. MERMET, care American Florist, Chicago.

**WANTED**—A man competent to grow cut flowers and plants, in a commercial place; must be strictly temperate. State age and where formerly engaged. M. E. HUTCHINSON, Portsmouth, N. H.

**WANTED**—A florist and market gardener (fruit and vegetable); one that can manage men and that is strictly temperate; board furnished. Address, stating lowest wages and giving references, W. J. HESSE, Plattsmouth, Neb.

**WANTED TO RENT**—By responsible party, near New York, about 15,000 square feet of glass in good order and suitable for rose growing. Communications strictly confidential. Address RESPONSIBLE, care American Florist, Chicago.

**WANTED**—A good man to take charge of grounds and greenhouse. Must be man of exemplary habits, and able to furnish good testimonials as to character and capacity. Address, with references, DR. H. WARDNER, Anna, Union Co., Ill.

**WANTED**—Immediately, a single middle-aged German man of sober and industrious habits, that understands growing cut flowers and plants; a good home with board and lodging. Address, stating wages, MRS. MARY J. GERLACH, Lock box 65, Kinton, Harlan Co., O.

**WANTED**—A practical florist who understands rose growing, cut flowers and general stock. Young German preferred; must be steady, reliable, hard working. Address with references, stating wages wanted. E. HALL & SON, Clyde, Ohio.

**WANTED**—A single thoroughly competent man who has experience in general propagating, rose growing and the cut flower trade; giving references, and wages expected. FROST BROS., 200 W. 6th St., Kansas City, Mo.

**WANTED**—An industrious, sober and practical florist (no foreigner) capable of indoor and outdoor work will find a permanent situation; American-German preferred. R. MATRE, St. Charles and Clinton Sts., New Orleans, La.

**WANTED**—Practical florist, foreman; business re- new place and cut flowers; must be a good salesman, propagator, etc., one that has had experience handling and making up cut flowers; must be temperate and reliable. Address, with references, R. A. KAWSON the Florist, Elmira, N. Y.

**WANTED**—A live, active, sober, industrious young man with more or less experience in the florist business and willing to make himself reliable and serviceable to his employer; situation permanent to the right man. State qualifications and wages required. J. ELLESTON, Floral Nurseries, Auburn, N. Y.

**WANTED**—Before April 1, young, unmarried man who has had some experience in growing roses and other cut flowers; a permanent place for the right man; references required; board and room furnished. Address, with references, J. D. SPAULDING, Jamestown, N. Y.

**WANTED**—First Assistant. Must be well up in growing roses and general run of cut flowers—none but one who understands that thoroughly. Must have best of references as to ability, character, married man preferred. State wages. Address ROSE GROWER, care American Florist.

**WANTED**—Good, sober, industrious man to take a truck farm of 10 to 20 acres for a term of years on shares. Greenhouses, cold frames, etc., and Horses, wagons and tools furnished. Early plants now started. A good chance for a man who can come soon. Address, with references, to be sold in any amount. Address P. O. Box 25, Corning, N. Y.

**WANTED**—A man as foreman that thoroughly understands the growing and forcing of roses, in one of the largest establishments in the vicinity of New York; must be temperate and capable of taking entire charge of place. All answers must be accompanied with references as to ability, character, and salary expected. P. O. Box 367, New York.

**VAUGHAN'S SEED STORE, CHICAGO**, has applications for two or three good, sober, industrious gardeners for private places.

**FOR SALE**—Two Hitchings boilers No. 15. Address A. H. SCHNEIDER, Oak Park, Ill.

**FOR SALE**—Greenhouse 80 x 24, cottage 20 x 20, lot 16 x 300; boiler, 300 feet water pipe; in city; at horse sheds. Price, \$1,000. Address B. B. WILEY, Room 2, Times Building, Chicago.

**FOR SALE**—The best retail florist's and seedman's business in the Northwest (population 150,000). Reason for selling with full particulars furnished on application. Address BATA, care American Florist, Chicago.

**FOR SALE**—Established florist's business; small capital required; if not sold will lease on very liberal terms; no experience required in other business. Correspondence solicited; will pay for investigation. Address CHARLES S. HART, Watertown, N. Y.

**FOR SALE**—Good-paying old florist business; 3 brick greenhouses, newest improvements; brick dwelling, large barn; four blocks from business center of city of 10,000 inhabitants; rare chance for a gardener; good reason for selling. Address A. B. American Florist, Chicago.

**FOR SALE, OR TO LET**—A florist establishment, situated in one of the most popular parts of Brooklyn, L. I., comprising six (6) greenhouses with steam heating apparatus, and a large hot water heater. One of said houses stocked with forty odd carnations. Also dwelling house, stable and sheds. Size of ground, 10 x 50 x 100 feet. Address J. L. HOETZNER, 385 and 387 Kent Ave., Brooklyn, L. I., N. Y.

### FOR SALE

At a bargain, in a town of 20,000 inhabitants, an old established florist establishment, consisting of 3 acres of land, 5 rooms, brick dwelling, house, stable, wagon shed, etc., three greenhouses well stocked, heated by hot water, hotbed shed, etc. All in excellent condition. Can be reached in one hour from St. Louis by three different railroads. For further particulars apply to

Michel Plant and Seed Co., 718 Olive St., St. Louis.

### GREENHOUSE FOR SALE

Belonging to the late Alexander Greenlaw, in Braintree, Mass., ten minutes to station on C. & R. R. Four greenhouses, heated by hot water, in one in Potatoes; one in Hybrids; one Pink house; one Violet house. Each 150 feet long. Town water on the place, recently introduced. The house is a cottage house of six rooms, and a house of twelve rooms; stable, wagon shed, and one and one-quarter acres of land.

Price of house.....\$2,000.  
Price of cottage.....1,500.  
Price of greenhouses.....500.  
Or will sell whole for.....7,500.

HOLBROOK & FOX,  
12 Postoffice Square, BOSTON, MASS.

## THE THREE B. B.'S.

BRIDE, BEAUTY,  
BENNETT,  
Still rack as the three best roses of recent introduction for forcing. I offer also  
PAPA GONTIER,  
PURITAN,  
METEOR,

And all other new and standard varieties of Teas, Hybrid Teas, Hybrid Perpetuals, etc., etc., that are desirable for the trade, in extra fine plants at reasonable prices. I also offer for the first time

COLUMBIA (NEW 1888).  
A bedding rose of very superior merit. For description, prices, etc., etc., write for Trade List to

JOHN N. MAY,  
SUMMIT, NEW JERSEY.

## TO THE TRADE!

## Two New H. P. ROSES

SPECIAL AWARD FROM THE

New Orleans Hort. Society, Mar., 1887

## DUC DE GALESE,

Bright Pink, a good bloomer and very fragrant.

## PRINCE BORGMESE,

Dark Velvety Red, a good bloomer and very fragrant.

PRICE LIST—Plants 12-in. \$1.00 each; 20-in. \$2.00 each  
10,000 Plants now ready for delivery.

## J. H. MENARD,

HORTICULTURIST,

DRYADES STREET, between Valmont and Duossat,

CITY DEPOT, cor. Delord and St. Charles Ave.,

NEW ORLEANS, LA.

Please Mention American Florist.

## E. BENARD,

ORLEANS, FRANCE.

ROSES ON THEIR OWN ROOTS

A SPECIALTY.

NURSERY STOCK OF ALL DESCRIPTIONS.

For particulars apply to

E. BENARD, JR., NILES, CAL.

## 25,000 Forcing Roses for Florists,

2½-inch pots. Per 100  
The Bride, Perle des Jardins, La France.....\$ 4.00  
Sour. Dup Ami, C. Mernet..... 4.00  
Francis Bennett, Duke of Comancha..... 10.00  
Mad. Watville, Etoile de Lyon, Malmaison..... 5.00  
Soubrouil, Hermosa..... 5.00  
Adam Tea, Queen Saffet, Sistrano..... 4.00  
Also 12 of the best new Chrysanthemums at..... 8.00

ED. MORAT, 719 Fourth Ave., Louisville, Ky.

## A. BLANC,

ENGRAVER FOR FLORISTS,

PHILADELPHIA.

\*\*\*

Electro of this  
Cut, \$1.50.

Catalogue of  
electros of plant,  
flowers, designs,  
etc., with 37 and  
588 supplements,  
35 cts., with vegetable, 50 cents,  
which deducted from first order.

\*\*\*

1888.

## ROSES FOR FLORISTS.

1888.

We offer the largest and most complete stock of Roses in this country. Straight 2½-in. plants, propagated from thoroughly matured field grown plants, and grown in ordinary soil without manure or other stimulating material. They resist disease, start quickly, grow rapidly and give best results.

ALL THE LEADING VARIETIES in large supply at very reasonable prices—Am. Beauty, Papa Gontier, Golden Pearl, W. F. Bennett, The Bride, Her Majesty, La France, Gent. Jacq., Perle des Jardins, Niphotos, C. Mernet, M. Robert, Pierre Guillot, Souv. d'un Ami, Sunset, Mad de Waderville, and hundreds of others.

ALL THE LATEST NEW ROSES—Luciole, Mad. Etienne, Mad. Scipion Cochet, Mlle. Claudine Perreau, Docteur Grillet, Vicomtesse de Wautier, Baroness de Fonville and all choicest varieties.

HYDRANGEA GRANDIFLORA—A Specialty.—Immense stock, strong, open ground plants, all sizes, very low. Also *Baists Variegated Leaved Althea*, Japan Judas, Japan Snow Ball (*Viburnum plicatum*), Japan Rose (*Rosa Rugosa*), Japanese Euclidas, and a full line of all the best Hardy Strawberry and Climbing Vines, including *Ampelopsis Veitchii* (Boston Ivy), *Akebia Quinata*, the New *Halliana*, and other Sweet-Scented Honeysuckles, etc., etc. New Violets, Chrysanthemums, and Hardy Phlox.

Special Wholesale Price List free on application to Florists, Market Gardeners and Dealers only. Lists priced, special selections made, correspondence solicited. Address

## THE DINGEE &amp; CONARD CO.,

—ROSE GROWERS, —

WEST GROVE, Chester Co., PA.

## ROSES! ROSES! ROSES!

We are booking orders for the leading Teas and Hybrids in any quantity desired at lowest possible prices.

SPECIAL INDUCEMENTS ON BRIDE AND MERMETS.

All First-Class Stock. We also offer a fine lot of

== FRED DORNER PELARGONIUMS. ==

For prices and information, address

## JOHN BREITMEYER &amp; SONS,

Miami and Gratiot Avenues,

DETROIT, MICH.

## New American Roses

SOUVENIR OF WOOTTON and ANNIE COOK.

Souvenir of Wootton is a red Hybrid Tea raised from seed of Ben Silene fertilized with Louis Van Houtte. It is perfectly double, as sweet as La France, and surpasses any hybrid tea in growth, and blooming in my place every shoot with hardly any exception produces a flower. The shoots are long and erect and produced quickly and very freely.

Annie Cook is a delicate shade of pink changing to white under glass in mid-winter. It is seedling from Ben Silene; extra strong grower, and the flowers can be grown to extra large size. Both roses besides being great winter bloomers will make valuable market roses.

New Violet, Md. Millet, of a distinct rose color shaded with lilac; has proved, so far, perfectly healthy. It is a splendid grower and an immense bloomer.

## PRICES:

	Per doz.	Per 100
Souvenir of Wootton, 3-inch pots.....	\$6.00	\$55.00
3-inch pots.....	5.00	45.00
Annie Cook, 3-inch pots.....	6.00	55.00
Violet, Md. Millet.....	2.50	8.00

All orders must be accompanied with cash.

ADDRESS:

J. COOK, FLORIST,

BALTIMORE, MD.

## PERLE DES JARDINS.

ROSES A SPECIALTY.

Vigorous and robust young plants, propagated from healthy stock, which was never afflicted with Black Spot, nor produced bulb-heads. Thumb pots, \$3.00 per 100; 3¼ pots, \$10.00 per 100. Also La France, Niphotos, C. Mernet, Ben Silene, at same rate. Papa Gontier \$10.00 to \$15.00 per 100. Discount by the 100.

## J. KADLETZ,

Box 170. STAPLETON, Staten Island, N. Y.

## NOVELTIES IN ROSES.

All the latest new varieties; also the leading forcing varieties Teas, Hybrid Teas and Hybrid Perpetuals.

Novelties in Chrysanthemums. Catalogue specialties at lowest rates.

Trade List now ready, mailed on application.

JACOB SCHULZ, LOUISVILLE, KY.

## JAMES L. BOYSON,

CAEN, (CALVADOS) FRANCE.

1st Prize for Cut Blooms, Paris, May, 1887.

My CATALOGUE of the NEW

## EUROPEAN ROSES

will be ready January 1, 1888, and will be sent FREE on application.

A large stock of the last two years varieties, as well as all the older kinds for sale.

Send for my complete Catalogue of over 1,200 varieties, with raisers' names and date of sending out

## — ROSES. —

## A. C. TUCKER,

Rose Grower,

P. O. Box 190. NYACK, N. Y.

Orders are solicited NOW for Spring delivery for the following plants, in any size pots and in any quantity:

PERLE DES JARDIN, NIPHOTOS,  
BON SILENE, LA FRANCE,  
SOUVENIR D'UN AMI, C. MERNET,  
AMERICAN BEAUTY, BRIDE,  
PAPA GONTIER, PURITAN.

Special discount given on all orders received up to Feb. 15th, 1888. Send for circular giving prices and terms.

## A. C. TUCKER.

Mention American Florist.

## IMPORTED H. P. ROSES,

Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagation quickly. Price plants for sale by the 100 or 1,000, at low rates.

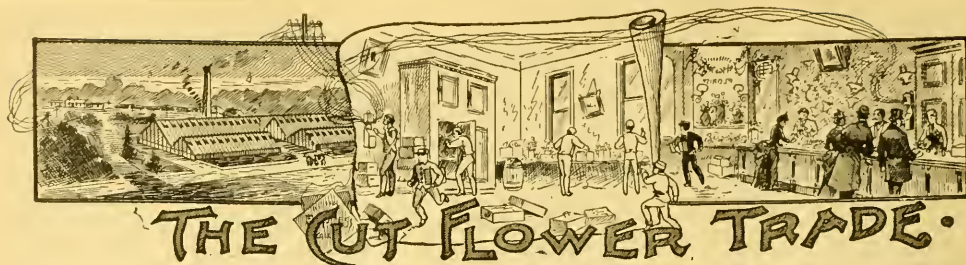
Address

## WILLIAM H. SPOONER,

JAMAICA PLAIN, (Boston), MASS.







### Spring Floral Styles.

While white, pink and yellow blossoms hold precedence over flowers of crimson color and the many rich tints that are appearing so gloriously with the tulip crop, yet of all decorations green arrangements are preferred, and florists are bending their efforts to make these as unique and elegant as possible. White blossoms are favorites for weddings. Lilies of all varieties are woven among the greenery of pagodas, tents and canopies for weddings, while bouquets for brides are made of either white lilies or *Cœlogyne cristata*, the latter very scarce.

The devices to display the skill of the florist in handling foliage are many. The thatching of coarse and fine leaves so that the best qualities of each are brought forward, is seen in wedding bowers. McConnell made at Delmonico's last week a canopy where the roof was irregular, and in its turrets and points and broken lines all covered in different ways with several kinds of leafage, it was an architectural triumph in greenery. White roses, white azaleas, white tulips, violets and white pansies are arranged with starry clearness in the profusion of foliage that signalizes room embellishments for weddings. Boxes for growing plants are made of bamboo, and these are placed on tables and cabinets, some containing foliage and others blooming bulbs. A great deal of ribbon is used on all designs, and even plant holders of tub size have their sash. The colors of Mermet, La France and Gloire de Dijon roses are exactly matched in satin and moiré ribbon of all widths. When put on gracefully to a piece of flowers this certainly affords an elegant finish. If awkwardly applied, it is of course a detriment. Florists who have their "hand in" and are constantly creating fine effects, naturally secure the patronage that pays, because those who expend large sums for flowers do not want caricatures.

The popularity of white flowers has brought out a new shade of white ribbon that has been imported by Klunder for an Easter novelty. It has an uncertain greenish, grayish shade that combines exquisitely with the Bride and Cornelia Cook rose, and is a lovely adjunct to the favorite Puritan. This ribbon will be tied around the outside of the handsome boxes for Easter gifts of cut flowers. Japanese snowballs will be an Easter novelty and are ordered ahead in quantity at 50 cents a flower. Forced blooms of *Weigelia rosea* are in market and very much esteemed for pink decorations; its tall stalks wreathed with blossoms are well adapted to the fancy of the hour.

New designs for Easter gifts are rush baskets, box shape, with one dozen white eggs woven into a cover that is strewn with straw and moss. Another is a circular basket for flowers, and high above

this rises a plaque supported by slender gilt sticks, on which are eggs, and which is designed to be festooned with foliage.

In table arrangements ferns take the lead for forming the mounds and pyramids in which are plunged the orchid flowers. Blooming smilax is in strong request and is now seen in the choicest designs. Alex. Burns introduced a new table decoration last week that is very much admired. A brook of plate glass, cut irregularly to represent a small stream, occupies the table, running from one end to the other, where it is lost among beds of primroses that widen out to surround and decorate the candelabra. The sides of the brook are planted with moss and ferns and cyperus, which are so placed that their shadows are reflected in the glass. Lily of the valley, hyacinths, *Narcissus poeticus*, tulips and mignonette are planted among the foliage. FANNIE A. BENSON,

New York.

### Floral Work at Buffalo.

The gates which usually remain quite closed to the florist decorator's art in this city, as looked at from a trade standpoint, were nicely swung open at the unusual occasion of a "golden wedding" reception, Feb. 11.

A large screen was the leading feature. This stood crosswise of the large double parlor, at the end of the room, and practically hid the mirror. Before this screen the happy pair stood when receiving their guests. Suspended overhead, two gilded cornucopias held flowers, and also the ends of two coils six inches in diameter, each twelve feet in length, which reached diagonally to opposite sides of the room and were fastened up near the ceiling. The figures "1838" hung from one coil and "1888" from the other. A monogram, with garlands, decorated the opposite end of the room.

Yellow flowers generally were used. The screen, set in angles, was composed of five panels, each measuring seven feet in height and two feet wide, the face of it thus making a total square surface of seven by ten feet, which, with exception of a foot in height of green at bottom, was filled in or covered solid with flowers. A Japanese effect in shades of yellow was produced by a ground of Buttercup carnations and double narcissus, while calendulas were worked among them in streaks and blotches. Other lines were made of white carnations edged or shaded with violets; dashes of dark pansies and spots of violets here and there. A cluster of *Niel* and *La France* roses in one part, and another of tulips, and a heavy band of *Perle* roses running clear across the central part at a descending angle, gave it a finish that called forth many admiring comments.

The coils were made of Buttercup car-

nations and double yellow narcissus, two rows of the former to one of the latter, and arranged spirally. The shades of these flowers, with the narcissus projecting somewhat over the carnations, produced a perfect effect. In this decoration fully 6,000 blossoms were used, and Mr. Long, who handled it, was congratulated on all sides. Considering the task of getting together so many flowers of one color, it certainly reflects credit upon him.

The monogram of letters, "S" of *Perle* roses and "R" formed of double yellow narcissus, both bordered by violets and raised on an oval-shaped ground of white carnations heavily fringed with *Acacia pubescens*, had light garlands of Buttercup carnations and *Perle* roses looped from it. It was arranged skillfully and in good taste, the credit of which is due to Mr. E. I. Mepsted, head man at Scott's.

Other decorations of palms, *Harrisii* lilies, garlanding smilax, etc., with the table pieces composed mainly of *Perle* and *Niel* roses, acacias and light orchids, arranged in mound forms, helped to make this affair a floral event of the season in our city, and something that encourages us to think that more good work in arranged flowers may sometime be the rule in the staid "Queen City."

D.

**FLOWER TRADE IN LENT.**—Reports sent the FLORIST from ten leading cities summarize thus: One reports "good" trade, two "good for Lent," three "fair" and four "dull," others adding that the bright weather has made such a surplus of stock that prices are badly cut. All are hopeful for a good Easter trade.

### Boston.

At the March meeting of the Gardeners' and Florists' club the discussion was upon "Cemetery Decoration." The essay on this subject was delivered by Mr. J. H. Morton of Mt. Hope cemetery, and was one of the best essays ever presented to the club. Seven or eight new members were admitted, and the treasurer's semi-annual report indicated a prosperous financial condition. Another sociable similar to that which was so successful in January is projected, to take place about May 1.

The spring exhibition of the Mass. Hort. society will be held on Wednesday, Thursday and Friday, March 21, 22, 23. Prizes amounting to over \$750 are offered, of which about \$300 goes to spring flowering bulbs, \$100 to orchids, \$50 to roses, \$50 to azaleas, and \$200 to various other plants and flowers. Nine medals are offered by the "General Union of Holland"—three each for hyacinths, tulips and *Polyanthus* narcissus. An attractive display is assured. W. J. S.

**THE AMERICAN FLORIST**

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 Cents a Line, Agate;  
Inch, \$1.40; Column \$14.00.  
Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per  
cent; 12 months, 20 per cent.

No reduction made for large space.

The Advertising Department of the AMERICAN  
FLORIST is for Florists, Seedsmen, and dealers in  
wares pertaining to those lines ONLY. Please to  
remember it.Advertisements for April 1st issue must  
REACH US by noon, March 26. Address

THE AMERICAN FLORIST CO., Chicago.

**Catalogues Received.**

L. Green & Son, Perry, O., trees and  
plants; Ellis Bros., Keene, N. H., plants  
and seeds; Michel Plant & Seed Co., St.  
Louis, plants; Kendall & Whitney, Port-  
land, Me., seeds; Hamlin Johnson & Co.,  
Providence, R. I., seeds; L. L. May &  
Co., plants and seeds; Siebrecht & Wal-  
ley, New York, orchids; Henry A. Ald-  
rich, Neoga, Ill., plants and seeds; Lewis  
Roersch, Fredonia, N. Y., grapes and  
small fruits; Schlegel & Fottler, Boston,  
seeds and plants; Uecke Bros., Seymour,  
Wis., evergreens and forest trees; J.  
Palmer Gordon, Ashland, Va., plants;  
Matthew Crawford, Cuyahoga Falls, O.,  
strawberries; West End Greenhouses,  
Mt. Pleasant, Ia., roses, plants and bulbs;  
Nantz & Neuner, Louisville, plants and  
seeds; L. A. Casper, Council Bluffs, Ia.,  
plants; Chas. T. Starr, Avondale, Pa.,  
plants; Currie Bros., Milwaukee, plants  
and seeds; Thos. S. Ware, Tottenham,  
England, plants, seeds and ferns; Paul  
M. Pierson & Co., Topeka, Kan., seeds  
and plants; Wm. C. Wilson, Long Island  
City, N. Y., plants; De Cou & Co., St.  
Paul, Minn., seeds; Jno. H. Sievers, San  
Francisco, plants; Ferris, Poughkeepsie,  
N. Y., seeds, plants and trees.

**ODORLESS FERTILIZER AND MEALY-  
BUG.**—In reply to "Jersey": 1. Pure  
bone dust. 2. Such quick growing plants  
as coleus had better be thrown out if in-  
fested badly with mealy-bug. No "liquid  
remedy applied with an atomizer" will  
kill the bugs without at the same time  
killing the coleus. Better throw them  
out and start with clean plants. If only  
a few or rare varieties brush the bugs off  
with a small paint brush having rather  
stiff bristles, and never permit them to  
get a start in your houses again. You  
will find that keeping them out in the  
first place is far easier than getting them  
out after they have once obtained a foot-  
hold.

**CORRECTION.**—In last issue of the  
FLORIST, in Mr. Koethen's article on  
"Verbena Rust" (page 326, fourteenth  
line from top of page), he was made to  
say: "We keep no verbenas in the  
greenhouse later than Sept. 1," when it  
should have read April 1, etc.

**M. MALSH,**

206 S. Halsted Street, CHICAGO.

**WHOLESALE DEALER IN  
CUT FLOWERS,  
AND GROWERS' AGENT.**

Regular shipping orders especially solicited.

**CHAS. E. PENNOCK,  
WHOLESALE FLORIST,**

38 So. 16th Street,

PHILADELPHIA, PA.

Mention American Florist.

**@Wholesale Markets.****Cut Flowers.**

BOSTON, March 9.	
Roses, Teas.....	\$3.00 @ \$4.00
" Perles, Niphetos.....	5.00 @ 8.00
" Mermets, La France.....	5.00 @ 12.00
" Jacqs, Hybrids.....	10.00 @ 25.00
Carnations, short.....	1.00
" long.....	1.50 @ 2.50
Lily of the valley.....	3.00 @ 4.00
Tulips.....	3.00 @ 4.00
Hyacinths.....	3.00 @ 4.00
Narcissus.....	4.00
Violets, Pinks.....	1.00
Smilax.....	12.00 @ 17.00
Adiantums.....	1.50
Heath.....	3.00

**NEW YORK, March 9.**

Roses, Perles, Niphetos, Bennett.....	4.00
" Gontiers, Sons.....	4.00
" Mermets.....	8.00
" La France.....	6.00 @ 12.00
" Am. Beauty.....	15.00
" Magna Charta.....	50.00
" Baroness Rothschild.....	50.00
" Anna de Diesbach.....	25.00
" Bon Silene.....	2.00 @ 3.00
Carnations, long stems.....	1.00 @ 1.50
" Dutch hyacinths.....	1.00 @ 1.50
Roman.....	3.00
Longhorn lilies.....	10.00 @ 12.00
Mignonette.....	5.00 @ 6.00
Narcissus trumpet major.....	3.00
Smilax.....	4.00
Tulips.....	20.00
Violets.....	.50

**CHICAGO, March 9.**

Roses, Perles, Niphetos.....	5.00 @ 6.00
" Bennetts, Dukes, Brides.....	7.00
" Mermets, La France.....	4.00
" Bon Silene.....	4.00
" Jacqs.....	12.50 @ 15.00
Carnations, short.....	1.00
" long.....	1.50
" Grace Wilder.....	2.50
Lily of the valley, daffodils.....	4.00
Romans, Narcissus.....	4.00
Smilax.....	18.00
Tulips.....	5.00 @ 6.00
Violets.....	.25
Callas.....	8.00
Adiantum ferns.....	1.00

**PHILADELPHIA, March 8.**

Roses, Tea.....	8.00
" Bennetts, Mermets.....	10.00
" Perles, Sons.....	5.00
" Niphetos, Bon Silenes.....	4.00
" La France.....	12.00
" Du. Beauties.....	25.00
" Cooks, Puritans.....	20.00
" Perle, Niel.....	15.00
" Gontiers, Brides.....	15.00
Carnations.....	1.50
Amies, white.....	3.00
Lily of the valley.....	3.00
Dutch hyacinths.....	8.00
Harriet lilies.....	8.00
Callas.....	8.00
Smilax.....	20.00
Ferns.....	20.00
Orchids.....	.50 @ 1.00
Violets, single.....	.25
" double.....	.50

**SPECIALTIES FOR MARCH.**

HEATH.

ORCHIDS.

DAFFODILS.

M. NIBLS, MERMETS.

LONG STEMMED CARNATIONS.

WM. J. STEWART,

67 Bromfield St., BOSTON, MASS.

**CUT FLOWERS AT WHOLESALE****N. F. MCCARTHY & CO.****WHOLESALE FLORISTS,**

63 Bromfield St., under Hort. Hall, Boston, Mass.

We have made large contracts with the best Rose  
growers about Boston to handle their entire stock  
this season. Our stock will consist of Papa Gontier,  
Bennett, Pierre Gontier, American Beauty, Mermets,  
La France, Malmaison, Cook, Bride, Niphetos,  
Perle, Niel, Anna Webb and Grace Wilder pinks,  
long stems and other flowers in variety. We shall have  
a particularly large lot of Mermets and Perles, so  
that in sending them when you fail to get them else-  
where you will feel reasonably sure of getting them.  
Unknown parties must give satisfactory reference or  
let us send C. O. D. Write for information.

**PALM LEAVES FOR EASTER****AND PALM SUNDAY DECORATIONS or FUNERAL DESIGNS**

CYCAS REVOLUTA LEAVES, size 3 to 4 feet, per pair, \$2.00; single, \$1.25.

Orders booked now for immediate or future delivery; can be supplied fresh every week.

J. A. DE VEER, 19 Broadway, N. Y.

Thos. Young, Jr., &amp; Co.,

**Wholesale Florists,**

INCORPORATED 1885,

20 W. 24th St., NEW YORK.

**W. S. ALLEN,****WHOLESALE DEALER IN CUT FLOWERS,**

36 EAST 23rd STREET, NEW YORK.

ESTABLISHED 1877.

Price List sent upon application.

**LaRoche & Stahl,**  
Florists & Commission Merchants

**CUT FLOWERS.**  
1237 Chestnut Street, PHILADELPHIA.  
Consignments Solicited. Special attention paid to  
cipping. Mention AMERICAN FLORIST.

**C. STRAUSS & CO.,**  
TELEPHONE 977. WASHINGTON, D. C.

**WHOLESALE ROSE GROWERS  
AND DEALERS.**  
**LARGE STOCK OF ALL THE NEW ROSES.**  
Orders booked for young stock at special rates.

**GEO. MULLEN,**  
17 CHAPMAN PLACE, (near Parker House),  
BOSTON, MASS.  
**WHOLESALE AND COMMISSION DEALER IN**  
**Fresh Cut Flowers & Florists' Supplies.**  
Flowers carefully packed and shipped to all points  
in Western and Middle States.  
Orders by Telegraph, Mail, Telephone or Express  
promptly attended to.

**HAMMOND & HUNTER,**  
Wholesale dealers in  
**Cut Flowers and Florists' Supplies**  
61 West 30th Street, NEW YORK.

**WELCH BROS.,**  
WHOLESALE FLORISTS,  
165 Tremont Street, BOSTON, MASS.

We make a specialty of shipping choice Roses and  
other flowers, carefully packed, to all points in  
Western and Middle States.  
Return Telegram is sent immediately when it  
is impossible to fill your order.

**KENNICOTT BROS.,**  
**WHOLESALE FLORISTS.**

**ALL CUT FLOWERS IN SEASON.**  
Write for price list. Consignments solicited.  
27 Washington Street, CHICAGO.

**CUT FLOWERS**

The choicest Cut Flowers at lowest market rates  
shipped C. O. D. Telephone connection. Use A. F.  
code when ordering by telegraph. For prices, etc.,  
Address,

**J. L. DILLON, BLOOMSBURG, PA.**



## Seed Trade.

PROVIDENCE, R. I.—L. G. Sherman & Co., seedsmen, assigned March 6.

POSTAL REFORM.—It is believed that a report favorable to the reduction of postage on seeds may be expected from the committee on post-roads and post-offices.

J. W. SYKES of Chicago, who failed in the grass seed trade some time since, was on March 10 convicted of having issued fraudulent warehouse receipts, and sentenced to three years' imprisonment.

MR. GEORGE E. WHITE died in New York Feb. 25, aged 60. Mr. White was born in Cambridge, Mass., and when 17 years old became clerk in a Boston publishing house. A few years later he became a partner in the firm of Parker, White & Gannett, dealers in agricultural implements and seeds. In 1868 he went to New York and engaged in business as broker and dealer in chemicals.

THE MAIL TRADE.—From all quarters we hear favorable reports of the mailing trade. The weather too has generally been very even, keeping the demand steady and avoiding, so far, any unusual rush which spring-like weather is sure to bring about. Jobbing houses report an early inclination to replenish stocks, showing good retail sales. Contracts now making for 1888 and '89 are likely to show a good increase.

GARDEN AND FOREST.—The first issue of this new horticultural weekly bears date of Feb. 29. Its twelve pages are made up typographically much like the *London Garden*, though showing unmistakably the Harper type. A 4-page insert on calendar paper has two good illustrations. Its make-up is such that all advertisements will be excluded from the bound volume—a feature more pleasing to the subscriber than the advertiser. The papers are all readable, and the new journal should certainly make friends in the pleasant field which it proposes to occupy. Historically it is noteworthy that its first article is an obituary of Prof. Gray, and its second of the *Gardener's Monthly*, both long in the front rank of American horticulture. But the art itself shall live on and her worshippers multiply.

## CANNAS! CANNAS!

Cannas, best strong bulbs.....per 100 \$2.00  
Candids, mixed, best....." 2.00  
Double Dahlias, strong bulbs....." 1.00  
Single Dahlias, strong bulbs....." 1.00  
Swanley White Violets, strong....." 2.00  
Pansies, best German....." 2.00

W. G. EISELE, Long Branch Village, N. J.

ESTABLISHED 1864.

## Asparagus Roots

We have to offer 400,000 two year old

Conover's Colossal Asparagus,

STRONG, VIGOROUS ROOTS.

And are now prepared to take orders for Spring of '88 or Fall '88. Also choice varieties of Melon, Tomato, Cucumber, Corn and Cabbage Seed.

WILLIAM R. BISHOP,  
SEEDSMAN,

Burlington, N. J.

Mention American Florist.

## SEEDS, SEEDS, SEEDS

—We offer unusual inducements:—  
to FLORISTS in

ROMAN HYACINTHS,

LILY OF THE VALLEY PIPS,

PAPER WHITE NARCISSUS,

LILIAN CANDIDUM, &c.

Crop of 1888.

Prices according to quantity required, on application.

J.M. THORBURN & Co., 15 JOHN ST. NEW YORK.

IT is a conceded fact that there is no better place in the U. S. for Nurserymen to sort up, Dealers to Pack, or Planters to order, than at the Painesville Nurseries, the aim of



THE STORRS HARRISON CO. being to carry a full line of Fruit and Ornamental Trees, Bulbs, Shrubs and Roses. Have a remarkably fine stock of Standard and Dwarf Pears, Kilmarnock Willows and other Weeping Trees; also Grape Vines, including all the Best New Sorts—Moore's Diamond, Empire State, Niagara, Jessica, Frances B. Hayes, etc. Can supply car loads of elegant, large Nursery-grown Elms, Catalpas, Maples, Poplars, Tulips, etc. The handsomest lot of Pyramidal Arborvitae and Irish Juniper ever offered, and acres on acres of other Evergreens. Prices reduced to suit the times. Come and see. Correspondence solicited. Catalogue Free. 33d Year. 700 Acres. 24 Greenhouses.



Address THE STORRS & HARRISON CO., PAINEVILLE, LAKE CO. OHIO.

## HAMMOND'S "SLUG SHOT", GRAPE DUST, &amp;c.

IN LOTS TO SUIT THE TRADE.

J. C. VAUGHAN, Chicago. PLANT SEED CO., St. Louis. J. M. MCCULLOUGH'S SONS, Cincinnati.  
J. A. SIMMEIS, Toronto, Ont. J. R. & A. MURDOCH, Pittsburg. A. W. LIVINGSTON'S SON, Columbus, O.  
And by Eastern Wholesale Seedsmen.



## EVERGREENS

Hardy varieties at lowest prices. Immense stock of trees and tree seeds for

GROVE & TREE CLAIM planting. Write for FREE PRICE LISTS.

W. D. BOYNTON,  
SHILOH, N. H.

When writing to advertiser mention Am. Florist.

## Best Hardy Rhododendrons,

Azaleas, new Japanese Maple, Tree Peonies, Lilac Syringa Japonica, Prunus Pissardi, Hydrangea Pannichin, Ampelopsis, Clematis, and all other choice HARDY Trees, Shrubs, Roses, etc., in any quantity at lowest rates.

COLLECTIONS OF BEST HARDY SHRUBS, very fine and cheap. Catalogues on application.

FRED. W. KELSEY,  
308 Broadway, NEW YORK.

SEED Potatoes—Beauty of Hebron; a few Early Ohio; 60 etc. a peck; \$1.50 per bush.  
H. W. McBride, Blair, Neb.

## NEW PLANTS.

Per doz.  
20 varieties New Fuchsias.....\$ 1.00  
" " Geraniums....." 1.00  
" " Chrysanthemums....." .50  
" " Wm. Swayde....." 3.00  
" " L. L. Lamborn....." .50

Antonis Coronaria....." 1.00  
Geraniums, Mad. Salleri....." .50  
Hellebore, dark, light, white....." .50  
"Colons, 20 varieties, ass't....." .40

A. GIDDINGS, DANVILLE ILL.

MELON SEEDS 14c. to 40c. per pound. Send for PRICE LIST.  
Odelia, Black Spanish, Kolb Gem, Dark Idiot, Iron Gold, Pride of Georgia, Hackensack, Hark, Golden Gem, Banooka. FREEMAN HURFF, Sweden, N. J.

## FOR SALE—MOON FLOWERS

We will book orders now for April and 1st of May delivery, at \$4.00 per 100. Warranted genuine. Prepared only from blooming plants. Can spare a few now at \$5.00 per 100. Also Storm King Fuchsias at \$4.50 per 100, \$40.00 per 1000.

L. TEMPLIN & SONS, CALLA, OHIO.

ROFFEA  
BY THE BALE OR TON.

Correspondence Solicited.

M. B. FAXON,

SEEDSMAN,

21 South Market Street, BOSTON, MASS

SEND FOR SEED CATALOGUE.



Second Edition.

GEO. A. SOLLY & SON'S  
BOOK OF PLANTS

For Carpet and Ornamental Flower Beds. With many it is a difficult task to lay out a carpet bed, or fancy design on the lawn, and perhaps more difficult to choose the proper plants to harmonize, so as to give the best effects. The object of these drawings is to assist gardeners and amateurs, and to enable them to choose the proper plants for their work. It is expected that this book will supply a long felt want, as it is the first and only publication entirely devoted to Fancy Flower Bed Designs.

This, our SECOND EDITION, consists of over 100 designs, finely engraved, on good paper, nicely bound, sent pre-paid to any address on receipt of Price, \$3. GEO. A. SOLLY & SON, SPRINGFIELD, MASS

Mention American Florist.





MOST EXTENSIVE STOCK

## JAPANESE &amp; CHINESE

Fruit Trees, Ornamental Trees, Bamboos, Conifers, Palms,

LILY BULBS AND SEEDS.

Stock carefully raised in our Nurseries in Japan.

H. H. BERGER &amp; CO., 315 &amp; 317 Washington Street,

SAN FRANCISCO, CALIFORNIA.

Catalogue free. Established 1878.

## BEGONIAS! BEGONIAS!

2,000 PLANTS OF SUTTON'S SNOWFLAKE.

One of the best white flowering Begonias, either for cutting or pot work. Transplanted plants at the low rate of \$2.00 per 100; \$10.00 per 1,000.

JOHN GOODE &amp; CO.,

53rd Street and Kimbark Avenue,  
HYDE PARK, ILL.

## FOR SALE.

Ten Roses and Carnations, 2½ in. pots, per 100, \$4.00  
Rooted cuttings of Coleus and Carnations to order,  
\$2.00 per 100.

Dracena Indivisa, \$1.50 to \$2.50 per dozen

W. W. GREENE, SON &amp; SAYLES,

WATERTOWN, N. Y.

GLADIOLUS \*  
\* TUBEROSES

ORNAMENTAL NURSERY STOCK.

SAMUEL C. MOON,

Wholesale Nurseryman and Gladiolus Grower,

MORRISVILLE, Bucks Co., PA.

Dahlias, ground roots, per doz. \$1.50; per 100 \$12.00

Peonies, per 100 \$5.00; per 1,000, 15.00

Charming Roses in var., per 100, 8.00

Hardy Roses in var., per doz. \$3.00; 10.00

Clematis, per 100, 25.00

Choice 2-year old grape vines: Niagara, Worden

Jefferson, L. Washington, Naomi, Pontic, Pock

ington, Veronique, Brighton, Moon's Early, etc.,

\$2.00 per ten. 1-year old vines, one-half price;

Hardy Clematis Bella Vitellina, etc., \$1.00 per doz.;

\$5.00 per hundred.

F. A. BALLER, Bloomington, Ill.

DESIRED PLANTS FOR FLORISTS.

Healthy, Vigorous, Cheap. Per 100

Alternanthera, best red, per 100, 4.00

" " yellow, per 100, 3.00

Chinese Primrose, white, double, per 100, 10.00

Chrysanthemum, 100 best named kinds, per 100, 5.00

Coleus, best kinds only, including Garland, per 100, 3.00

Echeveria, China, fine plants, per 100, 2.00

Geraniums, best named kinds, per 100, 3.00

" Mm. Sallier, silver-leaved, per 100, 2.00

Sanatula Indivisa, best silver bedding plants, per 100, 3.00

Verbena, best named kinds only, per 100, 3.00

Begonias, Carnations, Gladiolus, Vines, etc.

W. T. BELL, Florist, Franklin, Pa.

ROSES, ROSES, ROSES.

At \$4.00, \$5.00 and \$6.00 per hundred.

GERANIUMS,

At \$3.00 and \$4.00 per hundred.

COLEUS,

At \$2.00 and \$3.00 per hundred.

HELIOTROPE,

At \$2.50 per hundred.

Fine stock of VERBENAS, at \$2.50 per hundred,

\$2.00 per thousand.

Send for new Spring List if you have not received one. Address

GEO. THOMPSON &amp; SONS, Louisville, Ky.

CHOICE STOCK

—) FOR (—

FLORISTS AND NURSERYMEN.

VERBENAS, strong and healthy, mammoth

strain and varieties of our own growing,

ready to bloom, 2½ inch pots, per 100, \$20.00

2,000 Horse Chestnut, 6 to 8 inches, per 100, 12.00

2,000 " " 10 to 15 inches, per 100, 15.00

Forest grown Hard Maples, 6 to 10 inches, per 100, 2.00

2,000 Missouri Seed Caramel, 1 year, per 100, 25.00

1,500 strong 1 year Delaware Grape, per 100, 40.00

10,000 Cultured and Brandywine Raspberry, per 100, 5.00

15,000 Taylor Fertilizer Blackberry, the best, per 100, 10.00

2,000 Marlboro Red Raspberry, per 100, 20.00

5,000 Black Walnut, 3½ to 5 feet, per 100, 12.00

5,000 Black Walnut, 2 to 3 feet, per 100, 25.00

Seedling Altheas, 12 to 15 inches, per 100, 5.00

Purple leaf Highberry, 10 to 15 inches, per 100, 5.00

300 Aristolochia Sipho, 2 years, per 100, 10.00

200 English Ivy, strong 1 year plants, per 100, 12.00

500 Hydrangea, P. G. 10 to 15 inches, per 100, 7.00

200 Niagara White Grape, 2 years, per 100, 20.00

500 Niagara White Grape, 1 year, per 100, 12.00

200 Pyramidal Arbor Vite, 21 to 50 inches, per 100, 18.00

2,000 Clematis Virginica, 1 year plants, nice, per 100, 6.00

D. LEE &amp; SON, Madison, Ohio.

## SPRING BULBS, PLANTS, LILIES, ETC.

JAMES KING, 170 LAKE ST., CHICAGO.



CALADIUM ESCULENTUM.



TUBEROSE.



LILIU AURATUM.



BELLIS PERENNIS.

Per Doz.

Amaryllis Johnsonii, crimson, striped white, \$5.00

Amaryllis Formosissima, intense velvety crim-

son, 2.00

Amaryllis Atamaaco Rose, delicate pink, broad

spreading petals, 1.50

Amaryllis Vitis, white, striped red, 4.00

Per 100

Begonias, Tuberous rooted, fine for bed-

ding out finest ass'd colors, single, \$15.00 2.50

Caladium Esculentum, strong bulbs, 8.00 1.25

Canna Indica, strong tubers, mixed varie-

ties, 5.00 5.00

Canna Indica, strong tubers, named varie-

ties, 7.00 1.00

Canna Ehrenmanni, a large flowered variety,

crimson color, 2.50

Each.

Clematis Coccinea, scarlet, extra strong

plants, \$0.25 2.50

Clematis Jackmanii, purple flowered, 35 3.00

Clematis Crispa, 35 7.00

Per 100.

Cyclamen Persicum, 15.00 2.25

Dahlia, new, single varieties, ass'd colors, 15.00 2.25

Dahlia, tall, double varieties, ass'd colors, 12.00 1.75

Dahlia, dwarf, double sorts, same size

flower as the tall, 12.00 1.75

Dahlia, Pompon or Pom-pom, ass'd colors, 12.00 1.75

Dielstra Spectabilis Bleeding Heart, 12.00 1.75

Per 1000.

Gladiolus, fine, named sorts, assorted, \$6.00

Gladiolus, mixed, all colors, 2.00 \$15.00

Gladiolus, mixed, light colors, 2.50 20.00

Gladiolus, mixed, pink, striped and varie-

gated, 3.00 25.00

Gladiolus, mixed, yellow, 4.00 35.00

Lily of the Valley, a few well-kept pips

on hand, 1.50 12.00

Per Doz.

Hollyhock, roots, from choice seed, 8.00 \$1.25

Hyacinthus Candicans, flower stem 3 feet

high, 3.00 5.00

Iris Kemptii, double, or single, mixed, 8.00 1.25

Iris Kemptii, double, white, 10.00 1.50

Madrera Vine Tubers, 3.00 5.00

Musa Ensete, the new foliage plant, 25.00 4.00

Oxalis Bulba, fine mixed varieties, 1.50 25

Peonies, strong roots, assorted white to deep

pink, 10.00 1.50

Per 100.

Spirea Japonica, good clumps still in stock

Trigridia Grandiflora Alba, large pearly

white flower, 6.00 5.00

Trigridia Conchiflora, large yellow flower

My Tuberoses are well cured, and large,

strong bulbs, and fully cured in size to a

first quality grade, Per 100, Per 1000

Tuberoses Double Taliana, first quality, \$2.25 \$18.00

Tuberoses Pearl, first quality, 2.25 18.00

Per 100. Per doz.

Liliu Auratum, the golden banded Lily

of Japan, considered to be the finest of all

lilies. Just received an unusually fine lot

direct from Japan, \$9.00 \$1.50

Extra large strong bulbs, 12.00 2.00

Liliu Candidum, the Easter Lily, pure

white, very fragrant. Flowers 5 to 20 in

number in a compact head. One of the

best known lilies, and largely used for

forcing. Per 1,000, \$40.00, 5.00 75

Liliu Longiorum, pure white, trumpet

shaped flower. Native bulbs, 8.00 1.25

Liliu Roseum and Rubrum, Rose spotted

red. An easy-growing sort, showy

and distinct, 9.00 1.25

Liliu Speciosum Album Praecox, the

best white lily; petals tinged with pink

each 40c, 25.00 4.00

Liliu Wallici, a magnificent new Japan

ese variety, beautiful buff flowers spotted

with black—very distinct. Each 30c, 20.00 3.00

Liliu Kramerii, varying from delicate

blush to rich rose, fragrant, 20.00 3.00

Trade

Packet, Per oz.

Aster Victoria, white, \$ 25 \$3.50

Aster Victoria, mixed, 25 3.50

Alyssum, sweet, 5 25

Balsam, Finest florists' strain; white, 15 1.00

" " mixed, 15 1.00

Candytuft, white or mixed, 5 20

Hollyhock, fine double white, 15 1.50

" " mixed, 10 1.00

Mignonette, Miles Spiral, 10 50

" Giant Pyramidal, 10 50

Golden Queen, large flowering

" Matchet, new; dwarf; very

strong, 25 1.50

Mimulus Moschatius, (Musk), 20 5.00

Petunia Hybrid Maxima, finest double,

" blotched and striped, 15 1.50

Petunia Hybrid Maxima, large flowered,

mixed, 25 2.00

Petunia Hybrid Maxima, Fimbriata,

fringed edge, 25 2.00

**AUGUST RÖLKER & SONS,**  
44 Dey St., NEW YORK,  
Supply the Trade with  
**SEEDS, BULBS,**  
And all kinds of  
**FLORISTS' SUPPLIES.**  
1888 Trade List for Seeds now ready.

**BULBS, IMMORTELLES.**  
**J. A. DE VEER,**  
(Formerly of DeVeer & Boomkamp.)  
19 Broadway, New York.

SOLE AGENT FOR  
THE GENERAL BULB CO., Voelzenang, (Holland.)  
Ls. BREMOND FILS, Orléans, (France.)  
Offers to the trade, net without engagement, for  
prompt or Spring delivery. Per 100, Per 1000  
Lilium Auratum, large bulbs,..... \$9.00 \$80.00  
Excelsior Pearl Tuberoses, extra,..... 1.75 15.00  
First size,..... 1.50 12.00  
Gladioli, large bulbs, fine mixed,..... 1.50 12.00  
" Brenchloyensis,..... .30 7.50  
" scarlet & crimson, 1.00 9.00  
" pink & variegated 1.75 15.00  
" white and light, 2.25 20.00  
" yellow and yellow  
grounds,..... 2.50 22.50  
Hyacinthus Cardians, large..... 2.50 20.00  
per 100 per doz.  
Dahlias in fine sorts, undivided roots, 15.00 2.25  
" in separate colors, 12.00 1.75  
" in fine mixture, 9.00 1.25  
Cannas..... 5.00 25  
Caladium Esculentum, large bulbs,..... 12.00 1.75  
" good sized bulbs 7.00 1.00

QUOTATIONS ON ROMANS.  
PAPER WHITE NARCISSUS,  
LILIAM CANDIDUM, ETC.  
NEW CROP GIVEN ON APPLICATION.

**\*TUBEROSE BULBS\***

We are the largest growers in the country, and  
offer the best quality

PEARL TUBEROSES . . . . . per 1000, \$20.00  
DOUBLE . . . . . 20.00  
\$2.50 per 100 in small lots.

Trade List mailed free.  
**HENRY A. DREER, Philadelphia.**

**FLORIDA CROWN BULBS.**

Tuberoses, No. 1 and Tall double,..... per 1000, \$10.00  
Caladium Esculentum,..... per 100, 4.50  
Amaryllis Equestris, extra bulbs,..... 15.00

**A. H. CRANE,**  
**NASHUA, N.H.**

**SPIREA.**

Cut, or in Pots, for Easter.

**C. THOMPSON ADAMS,**  
SUNNYSIDE, WEST MEDWAY, MASS.

**A SPECIALTY.**

**SEEDS FOR FLORISTS**

CAREFULLY SELECTED,

And from which the best results may be  
expected.

ASTER, New Pearl, pure white . . . . . PKT. \$5  
" bright rose . . . . . 25  
" Boston Florist's, pure white, . . . . . 10  
" fine rose . . . . . 10  
" Zirngiebel's, white . . . . . 10  
BALSAM, Snow Ball, finest double white . . . . . 15  
PANSY, Improved Giant, best strain in cultivation . . . . . 50  
STOCKS, Boston Florist's Double white, superior to, and producing a larger per cent. of double flowers than any known strain . . . . . 75  
STOCKS, Crimson King, finest double crimson . . . . . 25  
Our strains of Cinerarias, Cyclamen, Calceolarias, Primulas, Mimulus, Verbenas, and Zinnias are of very superior selected strains.  
EXCELSIOR PEARL TUBEROSES, \$1.50 per hundred, \$15.00 per thousand

Wholesale price list for florists now ready. Send one.

**SCHLEGEL & FÖTTLER,**  
26 S. Market St., BOSTON, MASS.

OUR WHOLESALE CATALOGUE

— OF —

**BULBS**

Of all Sorts,

**CHRYSANTHEMUMS, &c.**

Is now ready. Will be sent to all applying that we know to be engaged in the trade—or to any furnishing us evidence, as cards, letter-heads or bill-heads.

**V. M. HALLOCK & SON,**  
**QUEENS, NEW YORK.**

**F. E. McALLISTER,**

— WHOLESALE DEALER IN —

**Seeds** For the Florist Market, Garden-er and Farmer. **Requisites** Such as Baskets, Im-mortalles, Grasses, Mosses, Boquet Pa-pers, Pan-pas Plumes, etc. **Bulbs** For the Green-house or Gar-den.

22 Dey Street, - - NEW YORK.

**SEGERS BROTHERS,**  
GROWERS OF  
**HOLLAND BULBS.**  
OUR SPECIALTIES ARE:

Holland Hyacinths and Tulips, in any quantity; also Crocuses, Narcissus, Daffodils, Liliums, Lily of the Valley, Gladiolus The Bride, Anemones, Ranunculus, Spiræa Japonica, etc.

References as to quality of our Bulbs, etc., to several United States Florists and Seedsmen.

Send for Wholesale Catalogue.

**LISSE, NEAR HAARLEM, HOLLAND.**  
WHOLESALE ONLY. NO AGENTS.

**SEEDS, BULBS, PLANTS,**  
SUPERIOR NORTHERN GROWN.  
**CURRIE BROS., SEEDSMEN AND FLORISTS,**  
Send for Catalogue. **MILWAUKEE, WIS.**

RELIABLE SEEDS FOR FLORISTS.

ZIRNGIEBEL'S Improved White Aster.  
— Improved White Perpetual Stock.  
— Improved Giant Candytuft.  
— Improved Giant Trimandeanx and Bugnot Fancy Pansies.

Trade packages of any of the above seeds, \$1.00 each,  
**DENYS ZIRNGIEBEL, Needham, Mass.**

**DUTCH BULBS.**

**JOHN BARTH, BOS.**  
OVERVEEN, near Haarlem, HOLLAND,  
LARGEST GROWER OF  
HYACINTHS, TULIPS, NARCISSUS, LILIES  
and all sorts of forcing bulbs.

Catalogue FREE on application.



**EVERGREENS**

Both native and nursery grown.  
Forest Trees and Tree Seeds.  
Immense quantity, lowest prices.  
Wholesale list, describing all leading varieties, free. It will pay you to send for it. **UECKE BROS., Seymour, Wis.**

**\*NEW\***

**CHRYSANTHEMUMS**

It is now generally acknowledged that

I have distributed most of the best new

Chrysanthemums of recent introduction.

I again offer fourteen new varieties of merit, quite distinct from any kinds now in cultivation, as well as all

**BEST OLDER KINDS.**  
List ready January 10th.

**H. WATERER,**

IMPORTER OF PLANTS AND BULBS,  
55 North 38th Street, PHILADELPHIA, PA.

**WANTED** Every florist to try the new yellow Carnation Starlight. See advertisement in another column, and send for price list of this and other new and standard vars. to Geo. Hancock, Grand Haven, Mich.





# NEW WHITE CARNATION SILVER SPRAY.

CHICAGO, ILL., Dec. 13, 1887.

The samples of Carnation blooms came safely and in good condition. I must say I am delighted with Silver Spray; it is the finest white Carnation I have ever seen; it is perfection itself. Make our order 400. Amy Phipps is even better than I expected to see considering its color.

CHICAGO FLORAL CO.  
W. G. NEWITT, Manager.

PAINESVILLE, O., Dec. 23, 1887.

The Carnations at hand, and must say am agreeably surprised at Silver Spray, it is even finer than when I saw it at your place early in the season. In shape and size it is all that could be desired, finely serrated, and very fragrant. It has all the good points of a first-class Carnation and must become popular. Book us for 1,000. Amy Phipps is a fine large flower, entirely distinct from any that I know of, and if it proves to be a free flowering variety in winter will be wanted.

R. GEORGE,  
of The Storrs & Harrison Co

—:—:—

## YELLOW CARNATION AMY PHIPPS

Is very Profitable for Forcing.



We now have in Stock

ALL THE  
NOVELTIES  
IN

FUCHSIAS,  
CHRYSANTHEMUMS

GERANIUMS,

— ETC. —



ALSO

A LARGE AND FINE STOCK OF

CARNATIONS,

CHRYSANTHEMUMS.

AND OTHER PLANTS.

Address

W. P. SIMMONS & CO.,

Geneva, Ohio.

## WESTERN FLORISTS

And any others who want  
*Cheap, Strong and Healthy Plants,*

—: SEND FOR:—

ROBT. BROWN & SON'S SPRING TRADE LIST.

All leading plants at low prices in large or small quantities.

GERANIUMS and COLEUS, new and old.

ALTERNANTHERAS by the thousand.

ECHEVERIAS by the hundred or thousand.

BEGONIAS in twenty leading kinds.

—: ALSO MANY NOVELTIES. —

Stock all in good, clean, healthy condition.

ADDRESS

ROBT. S. BROWN & SON,  
Box 99. KANSAS CITY, MO.

## WESTERN FLORISTS

If you need any plants not quoted in this list, write to me; I have a large stock of most everything in the plant line.

I OFFER NOW

Per 100

5,000 Asa Gray Geraniums.....	\$ 3.50
5,000 Grant Geraniums.....	3.50
3,000 Geraniums, 20 varieties.....	3.50
5,000 Rose Geraniums.....	3.00
5,000 Carnations, Hinz's White.....	2.00
Chrysanthemums, 30 varieties.....	2.50
Verbenas, Free of disease; named var.....	2.50
Coleus, 25 varieties.....	3.00
Ageratum, White Cap.....	3.00
Smilax.....	2.50
Double Petunias.....	5.00

SEND FOR TRADE LIST.

Address

N. S. GRIFFITH,

JACKSON CO. INDEPENDENCE, MO.  
(Independence is well located for shipping, being 8 miles east of Kansas City.)

Mention American Florist.

## ROSES AND PLANTS.

Before you order what you need, write for my Trade List. I have a large stock of TEAS, H. P. and MOSSES. If you have anything to exchange, name goods, and I will reply if favorable.

E. HIPPARD, YOUNGSTOWN, O.

The best Ventilator Apparatus, \$12.00.  
Best Steam Call Bell, \$5.00 to \$10.00.



# Hardy Herbaceous Plants



1870-1888.

For nearly twenty years we have been engaged in the cultivation and dissemination of

## HARDY PLANTS AND BULBS.

And our business is now the largest in the country for this class of plants. The only firm in the United States who makes a specialty of these plants alone.

One of the finest Collections of named Japan and German Irises to be found either here or abroad.

Our Catalogue contains a full selection of the best only.

Anemones, Aquilegias, Clematis, Hollyhocks,  
Christmas Roses, Funkias, Tritomas, Campanulas,  
Trilliums, Pæonies, Narcissus, Phloxes, Lilies,  
Veronicas, Orchids, Ferns, and Ornamental Grasses.

Price to the Trade on application.

## WOOLSON & CO.,

LOCK DRAWER E.

PASSAIC, N. J.





E wish to call the attention of florists to our stock of young

## \* ROSES \*

—AND—

## \* CARNATIONS. \*

We also offer a large stock of acclimated

## — RHODODENDRONS —

grown one year in this country and well set with bloom-buds. These plants are in perfect health and condition and will prove satisfactory.

We also have a large stock of Musa Ensete and other desirable plants. Send us a list of your needs and will give you low prices.

**B. A. ELLIOTT CO.,**  
PITTSBURG, PA.

Mention American Florist.

We offer a Few Hundred of

## CLEMATIS \* FLAMULA,

Strong plants, two years, at \$10.00, Cash.

**J. H. CAMPBELL & SONS,**

3601 Germantown Ave., PHILADELPHIA, PA.  
Mention American Florist.

**PATENT PLANT BED CLOTH.** Substitute for Glass on Hot Beds. Cold Frames, &c. Protects from frost, promotes sure and early growth. Also used on Heneries, &c. Prices, by the piece, 3, 6¢ and 10 cts. per yard. Also all kinds



of Waterproof Covers for Trucks, Wagons, Aer. implements, Hay-stacks and all farm purposes. Cheap, strong, durable. Circulars and samples free by mail. **U. S. Waterproof Fibre Co.,** 56 South Street, New York.

## 20 PLANTS FOR \$1.00.

Send for Illus. Catalogue of Collection comprising Abutilons, Begonias, Carnations, Chrysanthemums, Fuchsias, Geraniums, Helioptropes, Smilax, Tuberoses and Gladioli.

This unrivalled collection all for \$1.00; if by mail, 20 cents extra for postage. Per 100  
Strom King Fuchsias.....\$ 5.00  
Phenomenal..... 6.00  
Rooted cuttings of Strom King..... 3.00  
**P. E. FASSETT & BRO.,** Ashtabula, Ohio.

## CARNATIONS.

ROOTED CUTTINGS

**HINZE'S WHITE AND DE GRAW**  
\$1.00 per 100, \$10.00 per 1,000.

Also a number of other varieties. Send list of varieties you want and how many of each, for price.

Rooted cuttings of Verbenas, Coleus, Tradescantia, Mad. Sallered Geraniums, &c. Stock in best condition. Send for price list.

**PANSIES.** Wintered plants from cold frames, superb strains, the plants \$1.75 per 100, \$15.00 per 1,000. Selected strains of flower seeds, also seedling plants for the trade. Get list, it will pay you.

**ALBERT M. HERR,**

LOCK BOX 338. LANCASTER, PA.

## CARNATIONS.

ROOTED CUTTINGS NOW READY.

**HINZE'S WHITE, HENDERSON, PRES. DE GRAW, PRES. GARFIELD, LA PURITE**  
\$1.25 per hundred; \$10.00 per thousand.

**C. B. HUMPHREY,**  
Walesville, Oneida Co., N. Y.

Mention American Florist.

## \* NEW WHITE CARNATIONS \*

**WM. SWAYNE AND L. L. LAMBORN.**

The two best white carnations ever offered. **EARLY, FREE AND CONTINUOUS BLOOMERS.** Stock of these excellent sorts will be ready March 1st, 1888. Orders booked now, and filled strictly in rotation as received, Price, \$25.00 per 100.

Send for Cut and Descriptive List.

Wholesale price list of rooted cuttings of other leading sorts ready Jan. 1st.

**WILLIAM SWAYNE, Kennett Square, Pa.**

## READY FOR DELIVERY

**MARCH 15, 1888.**

**8000 STRONG PLANTS 8000**

Of the New Carnation "WHITE GEM." Prices, \$2.00 per dozen; \$15.00 per hundred.

**GEO. E. BUXTON, PATTEN & CO.,**  
Nashua, N. H. Lowell, Mass.

**ROSES FOR FORCING.** GROWN FROM THOROUGHLY RIPPENED FIELD-GROWN PLANTS. **LA FRANCE, MAD. DE WATTEVILLE, SUNSET, EPIA CANTIER, BRIDE, BOZ SILENE, MONA CHARTA, GEN. JACQUEMINOT, AND OTHER POPULAR VARIETIES IN LARGE SUPPLY.** SEND YOUR LISTS AND HAVE THEM PRICED.

SPECIAL QUOTATIONS IN LARGE LOTS.

Address **THE DINGEE & CONARD CO.,**  
ROSE GROWERS, WEST GROVE, PA.

## NEW CARNATIONS

**AM. FLORIST and WM. SWAYNE.**

"Am. Florist" is a beautiful rose orange, variegated with carmine; large flowers on long stems, after the style of Grace Wilder; low growing plant and continuous flowering; without bursting. "W. Swayne," this is the best commercial winter-flowering white carnation on the market. The petals are of great substance and durability, making it one of the very best blooms to ship long distances; is very large and of the purest white.

Strong plants of both varieties from 2½-in. pots at \$3.00 per dozen; \$25.00 per 100. They will be sent by mail at \$3.25 per doz., or one plant of each for 75 cts.

**CHAS. T. STARR, Avondale, Chester Co. Pa.**

## THIS INTERESTS YOU.

"STARLIGHT"

The new light yellow CARNATION, clear of stripes or markings; of vigorous growth, early and continuous bloomer; seventy five per cent. of flowers on long stems, and never bursts its calyx. Try it. Send for price list of Starlight, Wm. Swayne, L. L. Lamborn, Silver Spray and other new and standard varieties to

**GEO. HANCOCK, Grand Haven, Mich.**

## NEW CARNATIONS.

Orders booked for the two best whites

**WM. SWAYNE, L. L. LAMBORN,**  
delivered after March 1st, \$25.00 per 100.  
**CUTTINGS.**—Hinze's, Henderson and Snowden,  
\$1.50 per 100; \$10.00 per 1,000.

Send for price list of leading Carnations.  
**LEROY L. LAMBORN,**  
ALLIANCE, Stark Co., OHIO.

## CARNATION

**HINZE'S WHITE.**

25,000 from sand bench, in first-class condition by April 1. \$10.00 per thousand.

**Emperor of Morocco**, same colors; Jac. rose, and Louise Schiller, the best pink for long stems, \$2.00 per hundred. Ask for sample flowers.

**SCHILLER & MAILANDER,**

**NILES CENTRE, COOK CO., ILL.**

## FOR SALE.

A FINE ASSORTMENT OF—

## BEDDING PLANTS AND TUBEROSE BULBS.

Fine large flowering Pansy Plants out of seed bed \$1.00 per 100, or \$8.00 per 1000. Large transplanted Pansies, \$2.00 per 100.  
Swanley White Violets, large bunches, in bud and bloom at \$2.50 per 100, or will take Carnations in exchange for Violets.

**M. TRITSCHLER & SONS, Nashville, Tenn.**

## PANSIES AND COLEUS

BY THE THOUSAND.

For 100 Per 1000  
PANSIES, from 2½-in. pots.....\$ 2.00 \$15.00  
transplanted..... 1.50 10.00  
COLEUS, including Versa-fleur..... 2.00 15.00  
Golden Bells..... 2.00 15.00  
BEGONIA METALLICA, good plants 4.00 30.00

**J. W. DUDLEY & SON, Parkersburg, W. Va.**

## DOUBLE WHITE PETUNIA.

**MRS. G. DAWSON COLEMAN.**

Endorsed by such florists as Dreer, Henderson and Hilday, as the finest double white ever produced. Exquisite in shape, pure white in color. For floral work and bedding it has no equal. Mail, five for 75c; eight for \$1.00.

## NEW COLEUS FOR 1888.

Harry Harold and the Mikado..... 10 cents each.  
Tokio and Yellow Jacket..... 10 cents each.  
Nonesuch and Purple Prince..... 10 cents each.  
John Goodie, the Chicago Beder, doz. 50c; each 10c.  
The set of seven for 10c., two of a kind \$1.00 by mail.

**THOS. G. HAROLD**

**KINGSTON, Somerset Co., MARYLAND**

## CARNATIONS.

ROOTED CUTTINGS will be furnished to the

trade as usual in season.

**FLORETS** at all times in quantity.

Send for price list.

**JOSEPH RENARD,**

Successor to THOS. F. AL.

**UNIONVILLE, Chester Co., PA.**

## CARNATIONS.

ROOTED CUTTINGS OF

Edwardell, Scarlet Gem, Philadelphia Red, Crimson King, Snowden, etc., \$1.25 per 100; \$10.00 per 1,000.

Portia, Duke of Orange, Chester Pride, etc., \$1.50 per 100; \$12.50 per 1,000.

**PLANTS** ready March 15th at double the above rates. Plants if desired at one-half these rates. Many other new and desirable sorts. Send for price list and descriptions. Niagara Grape Vines 50¢ per 100. **W. R. SHELWIRE, Avondale, Chester Co., Pa.**

\* \* \* NEW \* \* \*

## CHRYSANTHEMUMS.

The most Select Collection ever offered in America

at the lowest cash price. Send for list.

**GENERAL COLLECTION, \$3.00 per 100.**

## NEW PINK CARNATION.

"W. H. ROLAND."

Guaranteed to be the BEST Silvery Pink Variety in existence. Now ready. Stock limited.

Good strong plants from 2½-in. pots, \$3.00 per doz.; \$30.00 per hundred.

**W. C. PYFER,**

**LANCASTER, PA.**

SEND FOR PRICE LIST.





All for \$1.50.

A St. Louis florist received from a lady a mail order at the holidays for a bouquet to cost \$1.50, and to contain the following flowers: "Chrysanthemums, rose and white; daisies, red and white; forget-me-nots; fuchsias; silver leaved geraniums; apple and rose heartsease; heliotrope; hyacinths, blue and purple; jessamine, white; mignonette; pansies; pinks, and a double red pink moss rose bud; sweet brier roses; tea roses; white roses; violets, yellow, blue and white." The gentleman seems to feel real bad that she did not include some orchids, so that he could have made her a bouquet worth the price offered, but to a disinterested onlooker it would seem as though nothing more was needed unless it might be a spray of Asparagus plumosus and a dash of pepper-sauce.

Another florist who does business in Massachusetts sends us an order which, he thinks, "takes the rag off of the 'full dollar's worth' published recently." It is as follows: "Mr. —: Enclosed find 30 cents. Would like you to forward me as many flowers as you can for the amount, besides the postage. I prefer Jacqueminot roses."

THE DATE at which your subscription expires is noted on the printed address label, and will be found on each number you receive. Those of our subscribers who write us asking when their subscription expires, can save themselves this unnecessary trouble by examining the label.

## \*—\* BARBED \*—\* GLAZIER \*—\* POINTS.

FOR SALE IN

BOSTON, MASS. . . . . by Wm. J. STEWART,  
67 Bromfield Street.  
PROVIDENCE, R. I. . . . .

CHICAGO, ILL. . . . . J. C. VAUGHAN,  
146 W. Washington Street.

Retail at 50c. per 1,000. 5,000 will be sent by Express free on receipt of \$2.50. FINESS, 35c. Each.

**B. B. CHANDLER,**

Patentee and Manufacturer,

HYDE PARK, MASS., U. S. A.

**SOMETHING NEW.**

OUR 3-PIECE BOX

FOR FLORISTS AND NURSERYMEN,

Which is the pride of the Florists.

ALSO LOCK CORNER BOXES OF ALL SIZES.

Sample and price list free.

**SMITH & SMITH,**

KENTON, Hardin Co., OHIO.

**SASH BARS**VENTILATORS, RIDGES, GUTTERING  
AND LUMBER.

NO WIDE-AWAKE FLORIST need be told  
it will pay him to use Sash Bars, etc. made from

— CLEAR CYPRESS. —

Bars all Shapes up to 20 feet long.

Send for circulars and estimates

**LOCKLAND LUMBER CO.,**

LOCKLAND, Hamilton Co., OHIO.



FOR THE TRADE.  
**FLORAL WIRE DESIGNS.**  
JAS. GRIFFITH,  
THE PIONEER MANUFACTURER IN THE WEST,  
305 Main Street. CINCINNATI, OHIO.  
SEND FOR WHOLESALE PRICE LIST.



ESTABLISHED 1853.

— THE —

**O. K. STEAM GENERATOR**

Is especially adapted to warming

**GREENHOUSES, GRAPERIES,  
AND CONSERVATORIES.**

Special features insure

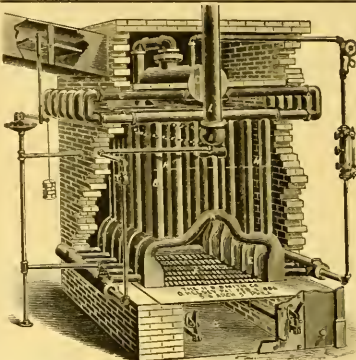
*Economy, Simplicity, Durability,*

Giving best results with least labor and fuel.

SEND FOR DESCRIPTION.

**THE H. B. SMITH CO.,**

510 Arch Street, PHILADELPHIA, PA.  
Mention American Florist.

**THE  
WHILLDIN POTTERY COMPANY,**

713 and 715 Wharton St.,

PHILADELPHIA, PA.

— USE —

**The Improved Rim Pot,**

AND SAVE ONE-HALF THE BREAKAGE.

Send for Illustrated Price List.

Samples, with sizes marked sent on application.

**SYRACUSE POTTERY.**

Thumbs.....\$2.54 Special 3-in. 4.61 4 1/2-in. .... 7.91  
2 1/2-in. .... 3.05 3-in. .... 4.75 4 1/2-in. .... 10.83  
2 3/4-in. .... 3.87 3 1/2-in. .... 5.25 5-in. .... 13.75

Above prices per 1,000, delivered free on cars.  
We ship all over the U. S. Free samples with first  
order. Order a trial crate. If you send check add  
10c. exchange. Send for list of prices and list of prices  
at which we pack to order assorted sizes in a crate,  
and for list of 17 ready packed crates. Notice that  
we sell at the above prices only in

**READY PACKED CRATES**

Shipped at buyer's risk and freight: each with order.  
**PRICES BY THE CRATE:** 3,150 Thumbs \$8.00;  
2,625 2 1/2-in. \$ 5.00; 600 4-in. \$ 4.75;  
1,675 2 3/4-in. 7.25; 500 4 1/2-in. 3.40;  
1,340 special 3 1/2-in. 6.00; 320 5-in. 4.40;  
1,150 3-in. 5.50; 100 6-in. 3.50;  
875 3 1/2-in. 5.50; 1,900 No. 3 Rose, 7.00.

**J. N. PERKINS, Manager, Syracuse, N. Y.****HAND TURNED POTTS  
From HILFINGER BROS.' POTTERY,  
FORT EDWARD, N. Y.**

**PRICES PER HUNDRED:**  
2-in. 40c., 2 1/2-in. 50c., 3 1/2-in. 55c., 4-in. 55c., 5-in. \$1.08,  
6-in. \$2.20, 7 1/2-in. \$4.00, 8-in. \$6.00, 9-in. \$8.50, 10-in. \$11.50,  
12-in. \$22.50, 14-in. \$30.00. Cylinders for Cut Flowers,  
10 1/2-in. 20, 10 1/2-in. \$1.50 per doz. We pack in cases which  
are very strong. No charge for packing. Our pots  
are well burnt and strong. TERMS CASH. Address  
**HILFINGER BROS., Fort Edward, N. Y.**

**HALES' MOLE  
TRAP**

For destroying ground moles in lawns, parks,  
gardens and cemeteries. The only **PRIZE** mole trap  
in existence. Guaranteed to catch moles where  
all other traps fail. Sold by  
equestrian, Agricultural Implement and Hardware  
dealers, or sent by express on receipt of \$2.00 by  
**H. W. HALES, RIDGEWOOD N. J.**

**D. C. SCHOFIELD,**

— MANUFACTURER OF —

**Improved Greenhouse****\*—\* FLOWER POTS \*—\***

NEW BRIGHTON, PA.,

Offers to the Trade the BEST

*Quality of Improved Shoulder Pot*

in the market at the

**LOWEST PRICES EVER OFFERED.**

SEND FOR PRICE LIST.

Orders will receive prompt and careful attention  
and satisfaction is warranted in every respect.**BOUND VOLUMES OF**

THE

**AMERICAN FLORIST**

VOLUME II.

Handsomely bound in cloth with leather back  
and corners, and title lettered on back in gilt,  
may now be had at this office.

**Price, \$2.25.****AMERICAN FLORIST CO.,**

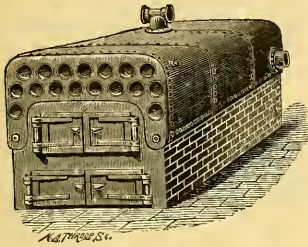
54 LA SALLE ST., CHICAGO.

ESTABLISHED 1854.

**Devine's Boiler Works**

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers.

Capacity from 350 to 10,000 feet of four-inch pipe.  
Send for New List.
**PETER DEVINE,**  
387 S. CANAL ST.,  
CHICAGO.

ESTABLISHED, 1866.

Floral Wire Designs,

Manufactured by

**N. STEFFENS,**

335 East 21st Street, - NEW YORK.

**Conservatories**

GREENHOUSES, ETC.

Erected in any part of the U. S. or Canada  
Glazed on the

Helliwell Pat. Imperishable System

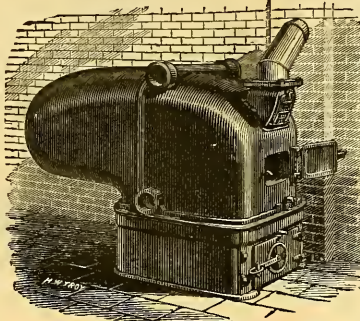
OR WITH PUTTY.

For further testimonials, illustrated catalogue or  
estimates address
**JOSEPHUS PLENTY.**  
HOPTICULTURAL AND SKYLIGHT WORKS.

Offices, 124 Pearl Street, NEW YORK.

**GREENHOUSE HEATING.**

BY A. B. FOWLER.

Explains fully all the best systems of heating  
greenhouses by both hot water and low-pressure  
steam. Tells you the points to consider in selecting  
an apparatus. How to adjust same to various loca-  
tions; gives the results of the latest scientific ex-  
periments. Shows how to compute the number of  
feet of pipe required for a given space; drafts and  
other important matters.  
It is highly commended by Mr. John Thorpe and  
others. Postpaid, 75c.Sent on receipt of price. Address,  
**AMERICAN FLORIST,**  
CHICAGO.Delegates to the next  
convention will travel  
via the **Pullman Car Line**TO AND FROM  
Louisville, Indianapolis, Cin-  
cinnati and the winter re-  
sorts of Florida and the  
South. For full information  
address  
**E. O. McCormick, Gen. Passenger Ag't, Chicago.****Greenhouse Heating AND Ventilating**

Send 4 cents postage for Illustrated Catalogue.

**HITCHINGS & CO.**

233 Mercer Street, New York.

 Five Patterns of Boilers,  
Eighteen Sizes,  
Corrugated Rire Box Boilers  
Saddle Boilers,  
Conical Boilers,  
Base Burning Water Heaters

Perfect Sash Raising Apparatus.

**FLORISTS' PRICE LIST FOR 1888,**

FROM

**WILLIAM MECHWART,****Terra Cotta Works,**

143 TO 147 LIBERTY STREET

CHICAGO, ILL.



2	inch Pots,	perl.	(2 1/2-in. wide by 2 1/2-in. high)	.....	\$3.50
3	inch Pots,	"	2 1/2-in. " 3-in.	.....	4.00
4	inch Pots,	"	3-in. " 3 1/2-in.	.....	4.50
5	inch " "	"	3 1/2-in. " 4-in.	.....	5.00
6	inch " "	"	4-in. " 4 1/2-in.	.....	5.50
7	inch " "	"	4 1/2-in. " 5-in.	.....	6.00
8	inch " "	"	5-in. " 5 1/2-in.	.....	6.50
9	inch " "	"	5 1/2-in. " 6-in.	.....	7.00
10	inch " "	"	6-in. " 6 1/2-in.	.....	7.50
11	inch " "	"	6 1/2-in. " 7-in.	.....	8.00
12	inch " "	"	7-in. " 7 1/2-in.	.....	8.50
13	inch " "	"	7 1/2-in. " 8-in.	.....	9.00
14	inch " "	"	8-in. " 8 1/2-in.	.....	9.50
15	inch " "	"	8 1/2-in. " 9-in.	.....	10.00
16	inch " "	"	9-in. " 9 1/2-in.	.....	10.50
17	inch " "	"	9 1/2-in. " 10-in.	.....	11.00
18	inch " "	"	10-in. " 10 1/2-in.	.....	11.50
19	inch " "	"	10 1/2-in. " 11-in.	.....	12.00
20	inch " "	"	11-in. " 11 1/2-in.	.....	12.50
21	inch " "	"	11 1/2-in. " 12-in.	.....	13.00
22	inch " "	"	12-in. " 12 1/2-in.	.....	13.50
23	inch " "	"	12 1/2-in. " 13-in.	.....	14.00
24	inch " "	"	13-in. " 13 1/2-in.	.....	14.50
25	inch " "	"	13 1/2-in. " 14-in.	.....	15.00
26	inch " "	"	14-in. " 14 1/2-in.	.....	15.50
27	inch " "	"	14 1/2-in. " 15-in.	.....	16.00
28	inch " "	"	15-in. " 15 1/2-in.	.....	16.50
29	inch " "	"	15 1/2-in. " 16-in.	.....	17.00
30	inch " "	"	16-in. " 16 1/2-in.	.....	17.50
31	inch " "	"	16 1/2-in. " 17-in.	.....	18.00
32	inch " "	"	17-in. " 17 1/2-in.	.....	18.50
33	inch " "	"	17 1/2-in. " 18-in.	.....	19.00
34	inch " "	"	18-in. " 18 1/2-in.	.....	19.50
35	inch " "	"	18 1/2-in. " 19-in.	.....	20.00
36	inch " "	"	19-in. " 19 1/2-in.	.....	20.50
37	inch " "	"	19 1/2-in. " 20-in.	.....	21.00
38	inch " "	"	20-in. " 20 1/2-in.	.....	21.50
39	inch " "	"	20 1/2-in. " 21-in.	.....	22.00
40	inch " "	"	21-in. " 21 1/2-in.	.....	22.50
41	inch " "	"	21 1/2-in. " 22-in.	.....	23.00
42	inch " "	"	22-in. " 22 1/2-in.	.....	23.50
43	inch " "	"	22 1/2-in. " 23-in.	.....	24.00
44	inch " "	"	23-in. " 23 1/2-in.	.....	24.50
45	inch " "	"	23 1/2-in. " 24-in.	.....	25.00
46	inch " "	"	24-in. " 24 1/2-in.	.....	25.50
47	inch " "	"	24 1/2-in. " 25-in.	.....	26.00
48	inch " "	"	25-in. " 25 1/2-in.	.....	26.50
49	inch " "	"	25 1/2-in. " 26-in.	.....	27.00
50	inch " "	"	26-in. " 26 1/2-in.	.....	27.50
51	inch " "	"	26 1/2-in. " 27-in.	.....	28.00
52	inch " "	"	27-in. " 27 1/2-in.	.....	28.50
53	inch " "	"	27 1/2-in. " 28-in.	.....	29.00
54	inch " "	"	28-in. " 28 1/2-in.	.....	29.50
55	inch " "	"	28 1/2-in. " 29-in.	.....	30.00
56	inch " "	"	29-in. " 29 1/2-in.	.....	30.50
57	inch " "	"	29 1/2-in. " 30-in.	.....	31.00
58	inch " "	"	30-in. " 30 1/2-in.	.....	31.50
59	inch " "	"	30 1/2-in. " 31-in.	.....	32.00
60	inch " "	"	31-in. " 31 1/2-in.	.....	32.50
61	inch " "	"	31 1/2-in. " 32-in.	.....	33.00
62	inch " "	"	32-in. " 32 1/2-in.	.....	33.50
63	inch " "	"	32 1/2-in. " 33-in.	.....	34.00
64	inch " "	"	33-in. " 33 1/2-in.	.....	34.50
65	inch " "	"	33 1/2-in. " 34-in.	.....	35.00
66	inch " "	"	34-in. " 34 1/2-in.	.....	35.50
67	inch " "	"	34 1/2-in. " 35-in.	.....	36.00
68	inch " "	"	35-in. " 35 1/2-in.	.....	36.50
69	inch " "	"	35 1/2-in. " 36-in.	.....	37.00
70	inch " "	"	36-in. " 36 1/2-in.	.....	37.50
71	inch " "	"	36 1/2-in. " 37-in.	.....	38.00
72	inch " "	"	37-in. " 37 1/2-in.	.....	38.50
73	inch " "	"	37 1/2-in. " 38-in.	.....	39.00
74	inch " "	"	38-in. " 38 1/2-in.	.....	39.50
75	inch " "	"	38 1/2-in. " 39-in.	.....	40.00
76	inch " "	"	39-in. " 39 1/2-in.	.....	40.50
77	inch " "	"	39 1/2-in. " 40-in.	.....	41.00
78	inch " "	"	40-in. " 40 1/2-in.	.....	41.50
79	inch " "	"	40 1/2-in. " 41-in.	.....	42.00
80	inch " "	"	41-in. " 41 1/2-in.	.....	42.50
81	inch " "	"	41 1/2-in. " 42-in.	.....	43.00
82	inch " "	"	42-in. " 42 1/2-in.	.....	43.50
83	inch " "	"	42 1/2-in. " 43-in.	.....	44.00
84	inch " "	"	43-in. " 43 1/2-in.	.....	44.50
85	inch " "	"	43 1/2-in. " 44-in.	.....	45.00
86	inch " "	"	44-in. " 44 1/2-in.	.....	45.50
87	inch " "	"	44 1/2-in. " 45-in.	.....	46.00
88	inch " "	"	45-in. " 45 1/2-in.	.....	46.50
89	inch " "	"	45 1/2-in. " 46-in.	.....	47.00
90	inch " "	"	46-in. " 46 1/2-in.	.....	47.50
91	inch " "	"	46 1/2-in. " 47-in.	.....	48.00
92	inch " "	"	47-in. " 47 1/2-in.	.....	48.50
93	inch " "	"	47 1/2-in. " 48-in.	.....	49.00
94	inch " "	"	48-in. " 48 1/2-in.	.....	49.50
95	inch " "	"	48 1/2-in. " 49-in.	.....	50.00
96	inch " "	"	49-in. " 49 1/2-in.	.....	50.50
97	inch " "	"	49 1/2-in. " 50-in.	.....	51.00
98	inch " "	"	50-in. " 50 1/2-in.	.....	51.50
99	inch " "	"	50 1/2-in. " 51-in.	.....	52.00
100	inch " "	"	51-in. " 51 1/2-in.	.....	52.50

**CACTUS AND BEGONIA POTS.**

4-inch.	.....	per 100, \$1.00
5-inch.	.....	1.50
6-inch.	.....	2.00
7-inch.	.....	2.50
8-inch.	.....	3.00
9-inch.	.....	3.50
10-inch.	.....	4.00
11-inch.	.....	4.50
12-inch.	.....	5.00
13-inch.	.....	5.50
14-inch.	.....	6.00
15-inch.	.....	6.50
16-inch.	.....	7.00
17-inch.	.....	7.50
18-inch.	.....	8.00
19-inch.	.....	8.50
20-inch.	.....	9.00
21-inch.	.....	9.50
22-inch.	.....	10.00
23-inch.	.....	10.50
24-inch.	.....	11.00
25-inch.	.....	11.50
26-inch.	.....	12.00
27-inch.	.....	12.50
28-inch.	.....	13.00
29-inch.	.....	13.50
30-inch.	.....	14.00

HANGING BASKETS, DECORATED, 8-in., per doz. \$1.20; 9-in., per doz. \$1.80.

No charges for packing up to 4-in.; from 5-in. to 15-in. 10 per cent. Cash with  
order, 5 per cent. discount.**SASH BARS.**  
IN EITHER PINE OR CYPRESS.

We carry a large stock in

12, 14 and 16 FOOT LENGTHS,

CLEAR CYPRESS \$2 per 100 ft.

1st &amp; 2d Cypress \$1.65 " "

**VENTILATORS**Made to Order. Write for  
Estimates.
**JOHN L. DIEZ & CO.,**  
530 N. Halsted St., CHICAGO.
**Ives' Putty Machine.**

Patented Jan. 8, 1887.

The best device ever invented for laying putty.  
With this you can make old leaky sash perfectly  
tight without removing the glass. It will do the  
work of five men in hedding glass.

Sent by Express on receipt of price, \$3.00.

**J. H. IVES, DANBURY, CONN.****SLATE AND IRON  
BENCHES  
FOR GREENHOUSES.**

Write for Circular.

**CHAS. S. PRICE,**  
LANSDOWNE, PA.

**JOHN N. MAY, Summit, N. J.**  
**SIEBRECHT & WADLEY, New York.**  
**CRAIG & BRO., Philadelphia, Pa.**  
**HILL & CO., Richmond, Ind.**  
**J. C. VAUGHAN, Chicago.**

Mention American Florist.



## Index to Advertisers.

Adams, C. Thompson.	339
Advertising Rates, etc.	355
Allen, C. E.	357
Allen, S. L. & Co.	357
Allen, W. S.	358
Bailey, F. A.	358
Bayersdorfer, M. M. & Co.	357
Hell, W. T.	358
Benard, P., Jr.	353
Benz, Albert.	363
Berger, H. H. & Co.	358
Bishop, Wm. J.	354
Blanc, A.	354
Bock, Wm. A.	362
Bonsall, Jos. R.	349
Bos, Joo. Barth.	359
Boynton, W. D.	356
Boynton, Jas. J.	355
Brackenridge & Co.	363
Breitmeyer, J. & Sons	353
Brown, Robt. S. & Son	361
Burpee, W. A. & Co.	357
Barrows, J. G.	340
Buxton, Geo. B.	362
Campbell, J. H. & Sons	362
Carndy, J. D.	362
Chandler, E. B. & Co.	362
Clark Bros.	357
Coles, W. W.	360
Cook, J. A.	353
Cowan, A. D. & Co.	357
Crane, A. H.	359
Currie Bros.	359
Curwen, John Jr.	349
Denton, L. J.	359
Deamond, Wm.	349
De Veer, J. A.	355
Devine, Peter	345
Diez, John L. & Co.	345
Dillon, J. L.	355
Dingee & Conard, Co.	362
Dreer, H. A.	357
Dudley, J. W. & Son	362
Elsie, Inc.	360
Eschle, W. A.	362
Elliott, B. A. Co.	362
Ellis Bros.	349
Exeter Mach. Wks.	356
Fassett, F. E. & Bro.	362
Faxon, M. B.	357
Ferry, D. M. & Co.	357
Fink & Co.	363
Giddings, A.	359
Goldman, M.	359
Goode, John & Co.	358
Greene, W. W. & Son	358
Hayles, Wm. F.	359
Hammond, Benj.	354
Hammond & Hunter.	355
Henneck, Geo.	359
Harold, Thos. G.	360
Heini, Joseph.	349
Henderson, P. & Co.	363
Herr, Albert M.	362
Higley, Henry G.	353
Hilfinger Bros.	361
Hipward, F.	359
Hitchings & Co.	355
Hoffman, H. M.	361
Hooker, H. M.	362
Hopkins, L. D. C.	349
Hort, Supply Co.	349
Humphrey, C. B.	362
Hurt, Freeman	356
Ives, J. H.	357
Johnson & Stokes.	357
Joseph, Miss Rosa.	349
Kulstelt, J.	363

Kelsey, Fred. W.	356
Kendall Bros.	353
King, James.	357
Krick, W. C.	357
Laub, Jas. M.	349
Lauborn, Leroy L.	362
La Roche & Stahl.	355
Lee, D. & Son	358
Leonard, S. F.	357
Livingston's Sons.	357
Lockard Lumber Co.	364
McAllister, F. E.	359
McBride, H. V. & Co.	355
McCarthy, N. F. & Co.	355
McFarland, Geo. F.	349
McFarland, Hodge.	362
McFarish, G. A.	357
Malish, M.	355
Mathews, Wm.	363
May, J. N.	353
Mead, Alex.	349
Meckwart, Wm.	363
Menard, J. H.	353
Merriek, A. T.	357
Michel Plank & Seed Co.	363
Middlemas, Archie.	349
Miller, Geo. W.	353
Monon Route.	355
Moon, Wm. H.	355
Moran, Samuel C.	358
Morat, Edw.	353
Mullen, Geo.	355
Myers & Co.	362
Patten & Co.	362
Pennock, Chas. R.	355
Perrins, J. N.	364
Phelps, H. L.	349
Pinto, Joseph.	355
Prior, Charles S.	363
Pfyer, W. C.	362
Reed & Keller.	356
Renard, Jos.	359
Roemer, Frederick.	363
Rolker, A. & Sons.	359
Saul, John.	362
Schiller & Mailander.	362
Schugel & Potler.	359
Schofield, D. C.	364
Schulz, Jacob.	355
Scollay, John A.	361
Segers Bros.	359
Shelmire, W. H.	362
Shiley, Hiram & Co.	363
Siebrecht & Wadley.	363
Simmons & Co.	361
Sitastions, Wants etc.	355
Smith, the H. B. Co.	364
Smith & Smith.	364
Solly, Geo. A. & Son.	364
Spooner, Wm. H.	353
Star, Chas. T.	362
Stevens, S.	362
Stewart, Wm. J.	355
Stinson, E. C. & Co.	361
Stora & Harrison Co.	356
Strauss, C. & Co.	353
Studer, N.	362
Swayne, Wm.	362
Templin, L. & Sons.	356
Thompson, C. & Son.	364
Thorburn, J. M. & Co.	356
Trichter, M. & Sons.	362
Ucken, C. & Co.	363
U. S. Waterproofing	362
Usher, C.	362
Uecker Bros.	359
Vaughan, J. C.	355
Waterer, H.	359
Weathered, Thos. W.	365
Weich Bros.	355
Whitlin Pottery Co.	364
Wilks, S. Mfg. Co.	362
Wood, I. C. & Bro.	349
Wood & Co.	361
Young, Thos. Jr. & Co.	353
Zirngel, D.	359



Sectional View.

## IMPROVED BOILERS FOR HEATING GREENHOUSES

GRAPERIES, POULTRY-HOUSES, ETC.

ALSO FOR HEATING

WITH HOT WATER UNDER PRESSURE.

VENTILATING APPARATUS

For Raising Sashes in Greenhouses.

GALVANIZED SCREW EYES

And Wire for Trellis Work.

Send for Catalogue.

Thos. W. Weathered,  
46 & 48 MARION ST., N. Y.



## Scollay's Valvular Plant Sprinkler.

ALSO THE IMPROVED PUTTY BULB,  
FOR GLAZING GREENHOUSES, ETC.

None sold at retail. Buy from your Seedsman.



PATENT HOT WATER BOILERS,  
For Greenhouses, Poultry Houses, Etc., Etc.

JOHN A. SCOLLAY,

74 and 76 Myrtle Ave., Brooklyn, N. Y.

## Improved Hot Water Boilers

For Heating

Greenhouses, Graperies,  
CONSERVATORIES, ETC.

ALSO

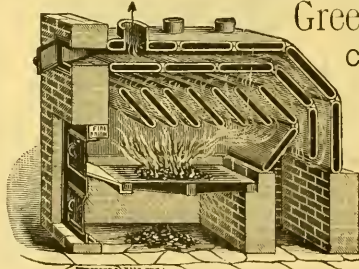
Cast Iron Pipe, Fittings, Valves and  
all Material for Heating by  
Hot Water.

Send for Catalogue.

MYERS &amp; CO.

1173 So. 9th St.,

PHILADELPHIA.



Sectional View.

## Wm. H. Moon's Tree Catalogue

of Fruit and Ornamental Trees, Shrubs, Small Fruits,  
Grape Vines, etc. 32 pp. free to all. Morrisville, Pa.

## SOMETHING NEW

— IN

## Heating Apparatus

— FOR

## GREENHOUSES.

Send for Illustrated Catalogue.

J. D. CARMODY,  
EVANSVILLE, IND.

## PIPE AND FITTINGS FURNISHED

— TO

PLANS AND SPECIFICATIONS.

Contracts solicited for

## HEATING GREENHOUSES.

Most improved plans.

ALL WORK GUARANTEED.

177 Prices furnished on application.

E. A. STIMSON &amp; CO.,

No. 22 and 24 Sears Street,

DAYTON, OHIO.

## GREENHOUSE HEATING

BY STEAM, BY HOT WATER, BY COMBINATION STEAM AND WATER.

EXETER MACHINE WORKS,

19 FEDERAL ST., BOSTON, MASS.

WORKS—EXETER, N. H.

## THE CELEBRATED

## WILKS WATER HEATER!

For Heating

GREENHOUSES,

DWELLINGS,

POULTRY HOUSES,

STORES, BATH TUBS,

ETC., ETC.

—

Send for Price List.



S. Wilks Mfg. Co.,

Cor. Monroe &amp; Clinton Sts., Chicago



ALL SIZES OF SINGLE AND DOUBLE THICK

GLASS FOR GREENHOUSES.

ALL GLAZIERS' SUPPLIES.

Write for Latest Prices.

# THE AMERICAN FLORIST



*America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."*

Vol. III. CHICAGO AND NEW YORK, APRIL 1, 1888. No. 64.

## THE AMERICAN FLORIST

Copyright, 1887, by American Florist Company  
Entered as Second-class Mail matter.  
Published on the 1st and 15th of each month by  
THE AMERICAN FLORIST COMPANY.  
GENERAL OFFICES, 54 La Salle Street, Chicago.  
EASTERN OFFICE,  
Room 81, Vanderbilt Building, New York.

All communications should be addressed to the  
general office at Chicago.

SOCIETY OF AMERICAN FLORISTS.—E. G. Hill,  
Richmond, Ind., president; John N. May, Sum-  
mit, N. J., vice-president; M. A. Hunt, Terre  
Haute, Ind., treasurer; Wm. J. Stewart, 67 Brom-  
field street, Boston, Mass., secretary. The fourth  
annual meeting at New York, August 14, 15, 16,  
1888.

### The S. A. F. Badge.

I notice that at the last meeting of the  
executive committee of the S. A. F. the  
matter of badges was touched upon in a  
way that indicated the need of a change.  
It is true that the badge has been degenerat-  
ing—getting weaker as it were from  
year to year in an attempted effort to re-  
tain the original form but to change the  
color and date for each succeeding  
meeting. But it must be borne in  
mind that the rose leaf with the let-  
ters S. A. F. have a hold on the original  
members, so I suggest retaining that  
form permanently, and for each meeting  
print the year and place of meeting on  
white silk ribbon four by one and a half  
inches to be worn fastened by badge on  
lapel of coat.

ALEX. MURDOCH,  
First Com. on Badges.

### Easter Flowers.

Bishop Whitehead of Pittsburgh, in a  
lecture March 16 decried the use of flow-  
ers at funerals or at church on Easter  
Sundays, saying that the flowers attracted  
crowds who came to see the display and  
not to listen to the services. It would  
appear that there is room for improve-  
ment in the Bishop's Easter Sunday  
services.

FALLING ROOFS of glass houses under  
the weight of the snow during the recent  
storm in the east were numerous, and  
heavy losses were incurred through dam-  
age to stock and houses. Even well con-  
structed houses suffered to some extent,  
but undoubtedly it was the old and poorly  
constructed ones that went down com-  
pletely. The snow also lay heavier on  
those houses which were connected by  
gutters, and the damage to such houses  
was consequently greater than to those  
which were detached. These facts point  
to a moral which it is unnecessary to name  
or enlarge upon,

### New York Notes and Comments.

Perhaps spring has come, as our ener-  
getic friend Mr. Falcorer says in the last  
issue of the FLORIST. But we have an  
impression that he would lose confidence  
in that remark about March 14.

We shall probably hear nothing but  
blizzard for some days to come; certainly  
the florists have good reason to remem-  
ber the great storm. The damage is very  
large as already reported, and all the re-  
turns are not in yet. One of the heav-  
iest sufferers is W. C. Wilson of Astoria.  
In his case, as in many others, the dam-  
age was caused by the weight of snow  
gathering on the houses. This crushed  
in the roofs, smashing the pipes by the  
pressure, and thus preventing proper  
working of the heating apparatus. The  
high wind rendered it impos-ible to make  
adequate repairs at once, and damage to  
the pipes prevented proper heating.  
Hence the terrible array of frozen plants.  
The only consolation that can be offered  
to each individual loser is that he has  
plenty of companions in his misery.  
Mr. Wilson suffered heavily by the wreck  
of one fine house of Jacqueminots as  
well as a lot of other stuff. John Hen-  
derson of Flushing has a lot of broken  
glass and wrecked sashes, but he will not  
lose many plants. J. H. Taylor of Bay-  
side has a severe smash; some of his fine  
roses frozen. Harvey Leach of Astoria  
is also a sufferer. A good many of the  
Long Island places have not been heard  
from at time of writing, but the damage  
among florists seems larger there than in  
New Jersey. Mrs. Gordon's place on  
Staten Island was severely injured by the  
weight of snow. No correct estimate of  
the loss has been given, but it is known  
to be very large, comprising both wrecked  
houses and frozen plants.

In New York city many of the florists  
having greenhouses connected with their  
stores have suffered damage. S. J. Burn-  
ham loses a lot of glass and some plants.  
Siebrecht & Wadley lose both glass and  
plants; their city greenhouse was com-  
pletely wrecked, and they lose all the  
handsome decorating plants kept there.  
Among them were two big kentias, a well-  
matched pair of great beauty; a lot of  
cycas and dicksonias, searforthias and  
general decorating plants, making a  
heavy financial loss, apart from the in-  
convenience. At Rose Hill nurseries  
there is a lot of broken glass, but few  
plants are gone.

Over in New Jersey the men around  
Madison, Summit and that locality seem  
except-nally favored; they have suffered  
little loss. Probably a little broken glass  
—that is about all. Peter Henderson lost  
a lot of glass; also Wm. Edwards of  
Jersey City. Joseph Towell of Paterson  
is a very heavy loser. Three large  
houses are completely wrecked, heating  
and all gone. One contained a full crop

of roses; the others were filled with  
spring stuff. He places the damage to  
the entire place, including plants, at  
about \$5,000. James Taplin of Maywood  
is another sufferer. Several houses are  
seriously smashed by the weight of snow,  
which burst the pipes and wrecked things  
generally. His loss is confined to the  
houses; few plants were frozen.

Apart from wrecked houses and frozen  
plants, the florists lose heavily in other  
ways. A week of business stagnation  
such as New York has been suffering  
means large loss on flowers, and even  
now, two weeks before Easter, the flower  
trade seems completely demoralized. Of  
course it must look up before April 1.  
During the progress of the storm all  
large orders given the florists were post-  
poned indefinitely; that one week may  
be considered entirely lost. The flowers  
that did get in, in spite of snowbound  
trains, accumulated in the commission  
dealers' charge, without any hope of  
sale. And in spite of damage to the  
growers, a tremendous quantity of flow-  
ers is now coming in.

Bulbs? Don't mention them to the  
commission dealers. There are enough  
tulips coming in at the present time to  
decorate every dyke in Holland. Hyacinths?  
Well, a week before the storm  
hyacinths in bloom were being sold at 2  
cents each, bulb and all. Hybrid roses  
are very plentiful too. But it is as Mr.  
Stewart—and every other commission  
dealer—says; flowers of the very highest  
quality will always sell, though the prices  
are sure to be small at times, but inferior  
flowers haven't the ghost of a chance  
nowadays.

This is a great time for street flower  
vendors; they are everywhere in the  
shopping district, with quantities of tu-  
lips, hyacinths, narcissus, violets and  
roses—good roses too. I notice that the  
florists complain of them, yet it seems  
doubtful whether they really hurt busi-  
ness in the stores. Most of the buyers  
are women who would not think of going  
into a florist's store except on special oc-  
casions. They see the flowers on the  
street, and consequently buy them, at-  
tracted by their cheapness as well as  
their beauty. They tuck a ro-cent bunch  
of daffodils into their jackets, when they  
would never dare go to an imposing  
store and ask for a corsage bunch for  
fear it would be above their means. If  
the florists advertised that they were sell-  
ing flowers at low rates, like the dry  
goods man offering a sacrifice in spring  
jackets, these customers would probably  
go to the stores. As for injuring the  
flower trade by making them common,  
no real flower lover is ever affected by  
such an idea. And certainly the street  
peddlers buy a lot of flowers, if not the  
best, and thus do something for the  
growers. However, this is looking at the  
matter from the grower's point of view;



the retailer is likely to regard it differently.

Some incidents of the blizzard were not without humor. In front of Le Moul's store was a tremendous drift of snow decorated with plants and flowers. This bore the appropriate legend, "The flowers that bloom in the spring, tra-la." Near by, a "Keep off the grass" sign was displayed. This arrangement met with a good many appreciative comments. EMILY LOUISE TAPLIN.

#### Annual Supper of the Philadelphia Florists' Club.

The fifth annual supper of the Philadelphia club occurred March 8, and was an occasion which will be long and pleasantly remembered by those present. About 100 members, including a half dozen visitors, sat down to the three tables loaded with good things both solid and liquid, which were almost buried in flowers, going to show that the Philadelphia florists believe in their own wares. Among the flowers on the tables were a superb panicle of *Hydrangea paniculata grandiflora* brought in by Mr. John G. Gardner, Johnstown, N. J. Mr. Gardner also contributed some fine blooms of a very handsome *amaryllis*, while a vase of remarkably fine *mignonette* was brought by Mr. J. N. May, Summit, N. J. Other guests from out of the city were Messrs. S. A. Wolcott, Batavia, Ill.; A. Outram, London; G. L. Grant, Chicago; James A. Penman, London.

Three hours were devoted to the disposition of the lengthy menu, after which followed a list of toasts. President Robert Craig congratulated the club on its prosperity, and stated that there were now 140 members. "The Society of American Florists" was responded to by Mr. J. N. May, "The Local Press" by Mr. Frank Smith, "The Horticultural Press" by Mr. G. L. Grant of the FLORIST, "Our English Cousins" by Mr. A. Outram, "The Dictionary of Gardening" by Mr. J. A. Penman, "Our Guests" by Mr. Gideon A. Greer, while President Craig and Messrs. Gardner, Hughes, Lonsdale, Outram and others favored the company with songs pathetic and comic. All formality was banished and good fellowship reigned supreme. May the Philadelphia club enjoy many more of its annual suppers and the brotherly love of its members never grow less.

#### A Winter Visit to H. H. Hunnewell's.

The fame of Mr. Hunnewell's beautiful place at Wellesley, Mass., is in a great measure due to its outdoor summer beauty and landscape effects. The Italian garden, the grand masses of rhododendrons and hardy azaleas, the belts and groups of rare conifers, the beautiful lake, are all among its best known attractions. But even in the winter much is to be seen there that is interesting and instructive, and the visitor is well repaid for his time and trouble.

From the railway station at Wellesley a coach runs directly past Mr. Hunnewell's grounds, which are about fifteen minutes' ride from the station. To the right as you go up the road are seen the stately buildings of Wellesley College, and not among the least attractive pictures are the groups of college girls to be met at every turn. But this, of course, does not interest florists.

Mr. Harris, the gardener, is almost as widely known as Mr. Hunnewell himself,

and he is always ready to welcome the fraternity and show them his treasures. A most refreshing sight at the present time is the peach houses. The peaches, apricots and nectarines are now in full bloom. The Malta peaches, with their long racemes of rosy flowers, are especially beautiful. The grapes, too, are in full leaf and flower.

In the big palm house the visitor finds himself in a veritable forest of tropical luxuriance. Some of the tree ferns and palms are very large. A magnificent plant of *Cibotium regale* measures twenty-four feet across. Two of the largest plants in this house are immense specimens of *Sabal umbraculifera* and *Stevensonia sechellarum*. In the orchid houses many fine *odontoglossums*, *cyripediums* and *phalaenopsis* are now in bloom. Some of the best are varieties of *Odontoglossum Alexandrie* and *escatorei*, *Cyripedium Dayanum*, *Dendrobium Ainsworthii*, *Phaius maculata*, *Calanthe nivalis*, *Phalaenopsis Stuartiana*, and *P. grandiflora*. A new cattleya house completed recently appears to be admirably suited for its purposes. The benches are of cement and are made in the form of shallow tanks filled with water, through which the heated pipes pass, and the plants are placed on gratings directly over the water. The *dracenas*, *crotons*, *anthuriums*, etc., all look well, and the finest display of *imantophyllums* ever seen here is now in full flower.

After going through the immense cold houses and cellars, one is not surprised at the great display which Mr. Harris is enabled to make in the summer, and it is strange that this cheap and effectual method of wintering tender and half-hardy plants for summer decoration is not more generally adopted by commercial growers. Here are the magnificent collections of rhododendrons and azaleas, besides rare hollies, yews, agaves, araucarias and yuccas in great profusion.

W. J. S.

#### Exhibition of the Maryland Horticultural Society.

The March exhibition of the Maryland Hort. Society was held here to-day (22d inst.) in the Academy of Music. There were but few exhibitors, owing doubtless to the blizzardy weather prevailing in this section for the past week. By arrangements made with the management of the Academy, persons attending performances in the theater were admitted to the exhibition without extra charge. It was the more unfortunate, therefore, that the attractions in this department were not more numerous. The exhibitors present, however, made very creditable displays. Mr. John Cook's exhibit of roses, hyacinths, tulips, etc., was very fine and formed the chief center of attraction to visitors. Mr. Jas. Pentland was out with a goodly display of palms, ferns, azaleas, lilies, camellias, etc. His collection of camellias (cut blooms), embracing over fifty varieties, contained some good things, which I will note more fully in a future issue. In addition to a collection of stove and greenhouse plants, R. J. Halliday had an excellent exhibit of seeds, implements, etc., which Robert Jr. made further attractive by decorating their sign with a carved portrait of his partner. Floral designs were scarce, the most noticeable being one from Miss Mary Patterson representing that time-honored institution, "The Old Oaken Bucket." The design was made up of Perle and *Niphetos* roses, violets

and pansies, and was particularly well done. It would certainly have carried off the honors but for the fact that it was not entered in time. Amongst the other exhibitors were Miss Kate Patterson, Messrs. Wm. Fraser, Fowler, Kress, Holden and Campbell.

The principal premiums awarded were as follows: 6 *Azalea indica*, first, E. Hoien; 6 *Cyclamen persicum*, three colors, first, Wm. Fowler; 12 best *Primula sinensis* and 12 best *Cineraria hybrida*, first, Wm. Fowler; 10 single hyacinths, pot-grown, first, C. Hess; second, Wm. Fowler. Box of hyacinths, first, John Cook; second, Jas. Pentland. Box tulips, first and second to John Cook. Box lily of the valley, first, R. Patterson. Collection camellias, first, James Pentland. Collection stove plants, first, Chas. Campbell; second, E. Hoien. Collection variegated foliage plants, first, C. Campbell; second, E. Hoien. Collection ferns, first, John Cook; second, E. Hoien. Specimen fern, first, C. Campbell. In cut flowers the premiums for roses, narcissus, tulips and freesia were awarded to John Cook. For purple violets, first, John Cook; second, C. Campbell. Violets (white), first, C. Campbell; second, John Cook. The honors for pansies were carried off by Wm. Fowler, and for table designs by John Cook and S. Feast & Son. Wm. Holden had a fine collection of strawberries, for which he received first premium. Messrs. Holden and Campbell monopolized the premiums for vegetables.

I should not omit to mention that Mr. Wm. J. Stewart of Boston paid a brief visit to the exhibition, adding materially to the dignity and mirth of the occasion. Harry Bayersdorfer of Philadelphia was also a visitor during the evening.

Baltimore.

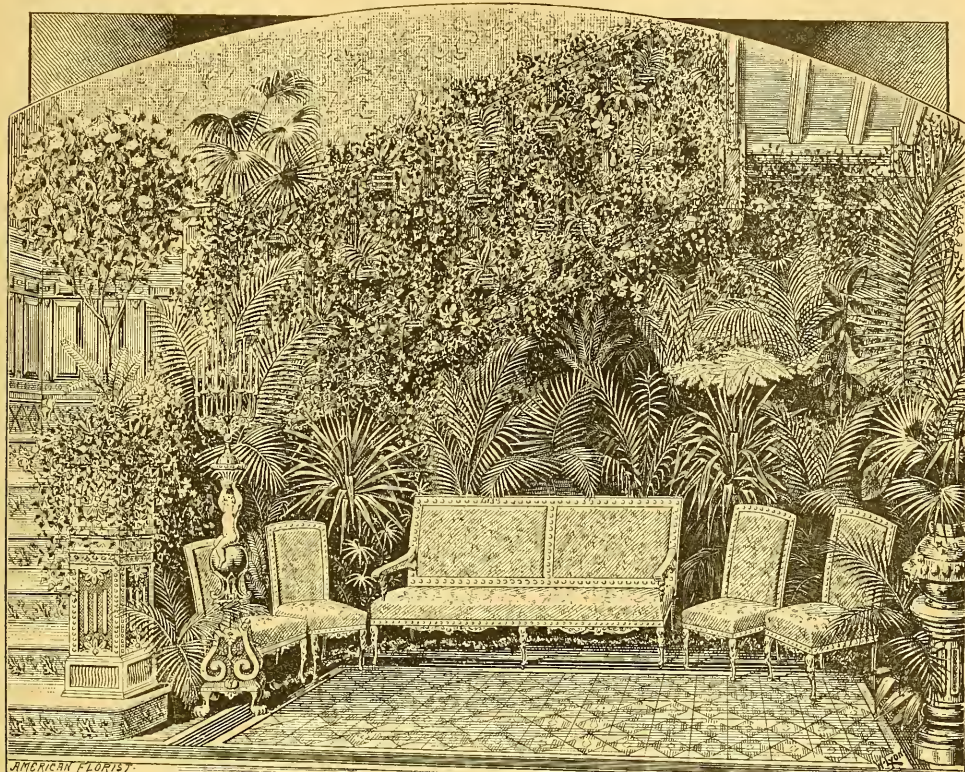
A. W. M.

#### Philadelphia.

Considerable damage was done hereabouts by the blizzard which visited this section of the country March 12 and 13. Snow collected on houses and crushed them in; glass was blown out and doors left ajar, inviting Jack Frost to enter, which he did without ceremony. Many establishments were inadequately heated to withstand so severe a storm. If we would only heed them, many a wholesome lesson has been taught. It is all very well to say we may never have such a storm again as long as any who are now living are alive, but we never can tell. For my own part, I will never again build a full-spanned roof house unless I happen to be in a very sheltered situation; nor will I use larger glass than 10 x 15. Mr. John N. May paid me a visit only the week before the great storm. He then remarked that the building of a full-span roofed house was a mistake. He gave as his reason that they were harder to heat, that is to say, a house built with a long glass roof as much exposed to the north or north west as it is to the south or southeast, is anything but an economical way to build a greenhouse which has to be heated in the ordinary way. Besides, the space which is brought under cover is of very little value comparatively. Better by far have a north side propagating house or a cold north side house, an independent structure. Mr. May's head is level. I have no particulars in my possession as to the losses about Philadelphia. It is not a nice subject to dwell upon.

Mr. John Burton says that the Madam Gabriel Luizets which are being cut now are the finest that have ever been seen





FLORAL DECORATIONS AT THE VANDERBILT BALL, NEW YORK.—PLATE NO. 1.

before in this city. It is gratifying to know that there is no sign of degeneration in this popular variety. It is pronounced by Pennock Bros. the "finest pink hybrid remontant rose." Mrs. John Laings are being brought in in large quantities now. The latter variety should only be used for very early forcing, for which purpose it is very well adapted, judging from the crop Mr. Evans had of it last December.

Edwin Lonsdale resigned the secretaryship of the Pennsylvania Hort. society at the last stated meeting. Daniel D. L. Farson was elected to fill the vacancy.

The Pennsylvania Hort. society's spring and bulb show opens Tuesday evening, April 10, at 8 o'clock, continuing the three following days from 10 A. M. until 10 P. M. In addition to the special prizes offered by the "General Union of Holland"—which consists of gold, silver gilt, silver and bronze medals—the Hort. society offers over \$300 in cash prizes to be competed for. If horticulturists from other cities who may happen to be here during the exhibition will call upon Secretary Farson at his office, a hearty welcome will be tendered them.

All the live florists have lots of good stuff ready for Easter. It is acknowledged that Craig & Bro. have the "boss"

lot of *Lilium longiflorum*, or the Bermuda variety. Messrs. Anderson, Harris and Colfesh, the Darby road florists, have some fine *Hydrangea otaksa*. These are more plentiful than usual. H. Waterer has a splendid assortment of Indian and Ghent azaleas, also a few rhododendrons. His main crop of the latter will be in its glory a few weeks later.

Craig & Bro. are cutting some of the best *Magna Charta* and *Captain Christys* ever seen here; the former are very large and highly colored, and *Christys* are perfect in form and delicate coloring.

Some florists are already talking about building more greenhouses, and are shaping their course accordingly. Steam as a heating medium has now taken the lead in all progressive establishments.

E. D. W.

#### Klunder's Decorations for the Vanderbilt Ball.

##### CORRIDOR AND STAIRWAY—PLATE NO. 1.

The staircase and banisters were wholly covered with ivy, smilax and choice varieties of orchid plants in bloom. Among these were large nepenthes. A large specimen of *camellia* was placed on the newel post. On the next post, above and back of this, was a fine *Latania borbon-*

*ica*. Palms, ferns and rubber trees were grouped under the stairs, and at the sides.

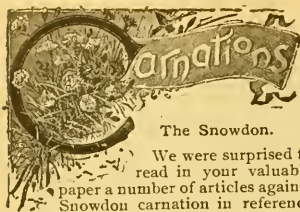
##### PLATE NO. 2.

Left hand side.—Musicians were screened behind Roman arches and vases of roses, vines and carnations. Two arches of these flowers with rich foliage rose from a platform, to form this screen. Under each arch and in spaces between were placed vases of roses, filled with immense long stem hybrids. There were also vases between the arches holding small specimen palms.

Right hand side.—The corridor fireplace, which was an elegant object. The right hand side showed fine seedling geraniums; just back of these were callas and longiflorums. On the left side was a specimen begonia near which was variegated holly, partially concealing the fancy fender. A pair of *ericas* were very beautiful and effective. Slender palms, such as *Cocos Weddeliana*, were mingled among other foliage. On the mantel were primulas, and from each end trailed down *Asparagus plumosa*.

WELL GROWN MIGNONETTE.—The largest racemes we have ever seen were sent us recently by Mr. John N. May. It is not surprising that such blooms meet with a ready sale at good prices.





### The Snowdon.

We were surprised to read in your valuable paper a number of articles against Snowdon carnation in reference to its flowering qualities. Our experience with Snowdon has been most satisfactory. We can get more bloom and as large florets as from any other variety excepting Hinze's White. We commenced picking about first of November, and have had plenty of bloom since and will continue to cut till the middle of summer. We have not lost a plant of Snowdon this season. De Graw does not pay us for planting out. Snowdon, Grace Wilder, Seawan and Portia we consider our four best varieties.

W. W. GREENE, SON & SAYLES.  
Watertown, N. Y.

### At Philadelphia.

Edwin Lonsdale's seedling carnations are certainly very promising. Mrs. Cleveland is a beautiful pink, in the way of Grace Wilder, but free from the washed-out appearance frequently presented by that variety. All who have tried it speak well of it. Mr. Lonsdale considers Hinze's White the best white carnation, and says it can be had early by rooting early and not pinching the buds during summer.

Robert Craig says E. G. Hill is a good early sort and a grand thing as a spring pot plant; that Pride of Penshurst is also fine as a spring pot plant, but is not good for winter work; that his namesake is a good late spring red; that Mrs. Cleveland is an excellent variety—a fine, clear pink.

### At New York.

John Taylor grows Hinsdale in immense quantities; it blooms remarkably free and can be cut largely with long stems. He likes E. G. Hill as a scarlet, and Hinze's White is the only white grown. He has cut and sent to market as many as 95,000 carnation blooms in one month. Large pans about six inches deep are used to hold the flowers in the cellar after being cut, a rack of slats being laid across the top to separate them into rows and hold them upright. It certainly economizes space and is much more convenient than the large number of pots which would be required to hold the same number. Short stem carnation flowers are now almost unsalable in the New York market; everything must have long stems.

### Carnation Hinze's White.

I would like to say a word in favor of this carnation in regard to its color. I agree with Mr. Veruor that by leaving it on the plant a few days it becomes pure white. I am inclined at the same time to think the soil has something to do with the color. I have about 500 of these plants in two different houses; the flowers on one bench are nearly all white, while on the other, where the soil is a little different, the flowers are colored with a deep pink, some of them making a decided contrast, considering the fact that the cuttings for the plants were all taken from the same set of

plants. I agree with Mr. V. that it is one of the best all-seasons carnations that I have yet seen. J. H. F.  
Stoughton, Mass.

### Experience with Some Varieties.

Considerable of late has been said in the FLORIST about the best varieties of carnations for winter flowering. Like most everything else, all growers have their pet varieties, arising from the success they have had under their own particular treatment of this and that kind. No two florists give exactly the same soil and treatment, especially watering, and owing a great deal to this does one variety succeed so much better at some places than at others. My own experience verifies this in part. While at the Gordon park, Cleveland, I grew as my main whites Pres. De Graw and Snowdon, the soil being sandy and highly enriched. They did splendidly with me, but after coming here, where the soil is clayey loam, I could not obtain the same success that I did there, even with similar treatment otherwise. I had therefore to stop growing them for a main crop and try varieties which would succeed, and with the exception of the new kinds which are now being sent out, I have tried all the older kinds.

For a retentive soil, with my treatment (which is a night temperature of 50° during the months of December and January, with sufficient water to keep the soil moist, but not approaching anything like wetness—in fact, I am on the dry side with everything during these months; as the days lengthen I increase my night temperature, give more water and an occasional watering with liquid manure). I find that Hinze's White, Catherine Paul, Secretary Blaine, J. J. Harrison and Century will make an almost continuous bloom from November to April. Catherine Paul has one fault only—it does not produce very many long stems, but for a continuous flowerer it is ahead of Snowdon in even its palmiest days. It is of a dwarf compact habit, flowers of good size, commences to flower early, and if not forced too hard will continue in bloom the entire winter months. If not pinched back when planted out in the spring, it makes an excellent summer flowering variety. It also, like Hinze's White, is very easily propagated.

Hinze's White, if not forced in too high a temperature, will produce more flowers on long stems and of a larger size than any other white variety I know of. I see complaints about its color not being pure white. True, when it newly opens it has a yellowish or creamy shade of color at the base of the petals, but this disappears as the flower expands, and by the time it has attained its full size it is of the purest white. A half-open flower, of any variety of carnation, or one forced open with a too high temperature, does not show half its beauty. Allow it the time its nature requires to bring it to perfection before it is cut, or else half its value is lost. MANSFIELD MILTON.

Youngstown, O.

RIPENING OF THE GROWTH.—In his notes on page 346 of last issue of the FLORIST Edwin Lonsdale asks in regard to the success of the carnation growers of Chester county, Pa.: "Is it not a question of ripening of the growth?" In reply I would say that it certainly is. Large, sappy plants will not produce flowers of as good quality or in as great

a quantity as small, well ripened ones. To secure plants in best condition, they should be grown during summer in a firm dry soil rather than a moist loose loam. This ripened condition is a necessity and in keeping with the biennial nature of the plant. L. L. LAMHORN.

RUST ON CARNATIONS.—Can some one tell me a remedy for rust on carnations? Hinze's White is quite subject to it in our section. J. L.

Alexandria, Va.

### Long Island Plant Notes by Wm. Falconer.

CANNA EHEMANNI.—There is a very great demand for this grand canna, and many of the florists are short of stock.

CROTONS are capital house plants, especially in the case of warm rooms in the winter time, and none stand better than does the old *C. variegatum*.

BEGONIA GLOIRE DE SCEAUX.—This is a really desirable addition to our begonias. Its foliage is large, fleshy, crimson bronze; its flowers rosy pink and borne in continuous profusion.

NEW YELLOW VERBENA, PRIMROSE.—I saw this verbenas in bloom the other day. I would say the flowers were cream-colored rather than yellow. In habit the plant resembles any other verbenas.

ASPIDIUM FALCATUM is one of the very best ferns grown for window or room decoration, as it lasts longer in good condition in such places than does any other fern I know. And the stout fronds, with their deep glossy green pinnae, are admired associated with heavy flowers in decorations.

SOLANUM JASMINOIDES GRANDIFLORUM is a good flowered form of an old favorite vine, which thrives well in a cool greenhouse and blooms all winter long. Planted out in summer, it grows with the rapidity of a weed. The flowers are white, showy, in clusters and produced quite abundantly.

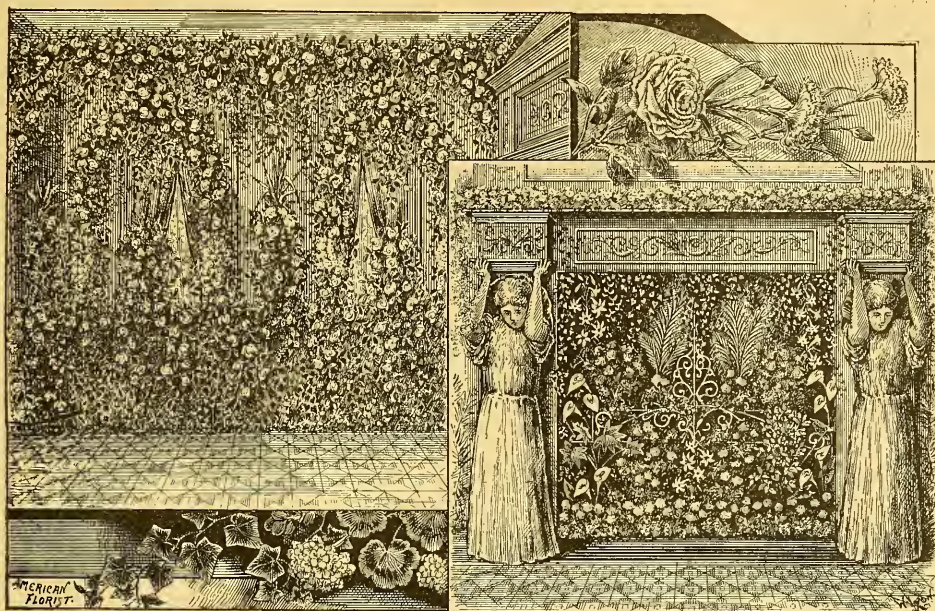
AT HALLOCK'S the double-flowering evergreen candytuft (*Iberis sempervirens*) is in bloom. The single-blooming form is one of our prettiest evergreen early-blooming hardy perennials. This double form is all very well as a variety, but I don't think it is any better or prettier than is the old single-flowered one.

TRITOMAS.—Some of the newer kinds of these, as *T. MacOweni*, *T. triangularis* and *T. corallina*, are quite expensive, but from seed sown now we can get up a good stock of plants which, when two years old, will be good blooming stock. Winter them in a cool greenhouse or warm frame and keep them growing continuously.

HELIOTROPE ROI DES NOIRS couldn't be much finer than I had it planted out last summer; it was very luxuriant and perfectly free of rust. I saved a few young plants of it, as I did of other kinds, for stock. They have been wintered in the same house and received the same care. To-day the other varieties are perfectly healthy, but every morsel of *Roi des Noirs* is rusty.

ADIANTUM FORMOSUM is seldom talked of in connection with cut flowers, and florists may not like it because it isn't as airy as *A. cuneatum* or *gracilimum*, or as rich as *A. Farleyense*, but certain it is that in a cut state it will outlast any of the others. The fronds are large, hence not so useful as those of *A. cuneatum* in fine work, but in heavy work we not only have room for but we really need them.





FLORAL DECORATIONS AT THE VANDERBILT BALL, NEW YORK—PLATE NO. 2.

SHOW PELARGONIUM ("Lady Washington") Madame Thibaut is the finest variety that we have got, and one of the grandest of its race. Old plants in bloom now. Young plants—struck last September—in 6 inch pots, in a cool house, will come in in April and May. It forms a bold but compact bush and has capital foliage. Flowers in large clusters, somewhat wavy, white, blotched and suffused with bright rose.

RUDGEA MACROPHYLLA is a Brazilian evergreen shrub with very large, simple, opposite, evergreen leaves. It is now in bloom with me. The flowers are white, tinged inside with lemon, and densely massed into terminal globose heads about four inches across. The habit of the plant is somewhat ungainly. The flower-heads are showy enough, but more odd than beautiful. I cut it back a little when it has done blooming. Healthy plants bloom when some fifteen to twenty inches high.

ARNEBIA CORNUTA.—This is a new annual from Afghanistan, and which, one or two years hence, will be sent out from Europe with great eclat. We got a few seeds of it this spring. It is spoken of as a most ornamental species, free-growing and copious blooming; flowers yellow with purple spots. Most of us are familiar with *Arnebia echinoides*, a perennial species and one of the choicest hardy plants grown. Its flowers are also yellow and have five dark purple spots on each bloom when it opens, but in a few days these spots disappear altogether. Max Leichtlin says the same is the case with the new annual.

KÄMPFER'S IRISES FOR SUMMER FLOWERS.—We have nothing more gor-

geous. They come into bloom about the first of July and last a fortnight. They succeed the first flush of sweet peas and mignonette, and immediately precede the flush of gladioluses and China asters. They are perfectly hardy and grow and bloom well in any good ground, but the moister the better. We can increase them in quantity by division, and raise them with the greatest ease from seed. Most of the seedlings will bloom the second year. We have all shades of purple—the most intense royal purple and gold, and pure white varieties, also most curiously marbled flowers. True, the individual flowers are of brief duration, but they bloom in succession, and the buds after being cut open well in water. For a night or a day they are magnificent, and as they should be cut with their long leafy stems, orchids cannot surpass them in rich effect when they are used in large masses and loosely arranged.

JAPAN IRISES.—We have just received some fifty kinds of Kämpfer's irises from a Japanese gentleman from Japan. They left Japan last November, but some how or other failed to reach us till Feb. 24. In packing, the roots had been lifted with a lump of the clay mud attached to them, and this was pressed about the roots and into a solid ball and tied together with stout cord like marlin. A label was affixed to each ball. In this way they were solidly packed in a box with a very little moss or straw in it, evidently strewn among the balls of roots to prevent them rolling when the box was being tossed about on its way hither. Every plant is alive and in good condition, and all have started to grow, but I don't expect they will bloom this year. But many of the labels had rot-

ted and been broken before they got here, and only a few are legible. Now these irises were shipped at the proper time, the end of the growing season, a period when cold would not hurt them nor heat excite them into fresh growth. Had they been lifted at this season and sent to us, probably most all of them would be dead before reaching here, as having had their full period of rest, the least extra heat would incite new growth, and thus generate heat and rot.

#### Flowers and Lichens.

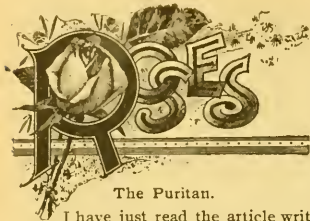
A portion of the basement under the store of Evans & Battles, Philadelphia, which is partitioned off as a cold room for storing their stock of flowers, has the walls and ceiling covered with selected bark on which is growing a considerable number of lichens. With the flowers placed in jars of water and tastefully arranged on shelves, the rustic background of bark, lichens and moss create a strikingly beautiful effect, and turn what would otherwise be a rather gloomy place into a charming grotto. The idea is certainly worth of imitation.

MIGNONETTE DAMPING.—Our mignonette damps off before it has attained the fourth leaf. Can some one tell the reason? Have tried different temperatures and soils with same result, and my neighbors have the same luck. Any information will oblige.  
J. L.

Alexandria, Va.

WE SHALL PUBLISH 7,000 copies of next issue. Send in your advertisements early. No increase in rates.





I have just read the article written by H. E. Chitty on this rose, and in reply would say that his language is more forcible than just. He states that in "his opinion the Puritan is not a good rose, and that hereafter it will make no friends; that no person having knowledge of what constitutes a good or useful rose will ever grow it after they pull out those already planted."

What does constitute a good rose? In reply I would say that a good rose is one that has perfect symmetry, is of good size, has fine foliage, has fragrance and is pleasing in color. Now I claim that the Puritan has all of these points; it is about the same shape as Baroness Rothschild, and I have never yet heard any one say that the Baroness is not symmetrical. It is always of good size and has fine foliage when properly grown. The fragrance is very delicate, being suggestive of the magnolia. It is pure white in color, and therefore cannot in any way offend the eye.

What constitutes a useful rose? is the second question naturally arising in reading his article. In answer to this inquiry I would say that a rose to be useful must first of all be good, and after it is found to possess this necessary qualification, it must then be found whether or not it is profitable. Is it a free bloomer or shy? Can it be sold at a price to pay? The Puritan is a very free blooming rose for its size, and when properly grown the blooms are so grand that they will readily sell for a good price, and make a much better return than many other roses that are considered among the most profitable at the present time.

Mr. Chitty writes further: "I believe it to be to all intents and purposes absolutely dead." I understand him to mean by this that the rose is not admired; if this is his meaning I should say that he is not in a position to hear the flower buyers express their opinions. "What a beautiful rose the Puritan is" is almost a universal expression. Were the Puritan rose at Mr. Chitty's greenhouses to have the proper conditions as to soil, culture, etc., his eyes never would catch "a glimpse of ghastly product, consisting of sickly, greenish white, bilious, cabbage looking so-called flowers"; but rather he would see a house filled with plants of a strong, thrifty rose, having magnificent wood and foliage and on the end of every shoot there would be a rose developed or developing which would be as great a treat to look at as a picture by one of the old masters.

Mr. Chitty goes on to speak ironically of the "keeping" qualities of the Puritan. This gives me an opportunity to say that the Puritan is a rose very easily bruised, and I think the best way to ship it into the market is to use deep boxes and have a wire frame three or four inches from the bottom; this space is filled with moss and the stems are then stuck in the moss that they may be in an upright position; this keeps them from bruising and the flowers will then retain

their freshness in the retail store for a long time.

In conclusion I would like to add a few words as to the wholesale denunciation that is prevalent among our rose growers as to new roses, and show if possible, the harm done by the same. In growing a new rose it is not expected that we will make a success of it the first time we try it. Different roses require different treatment and I would suggest that our florists should not be discouraged by want of success; try a different method, give the rose another chance and you may possibly find that you have one of the grandest acquisitions yet sent out in roses. Brilliant examples of this are shown in La France, Catharine Mermet and Papa Contier, all of which were frowned down until some one persistent grower found their good qualities.

Since writing the above I have found in looking up the matter of the popularity of this rose that it far exceeds my ideas: as an instance of this, I find that we have retail orders in at the store to the extent of 172 Puritan blooms to be delivered Thursday, March 8.

CHAS. F. EVANS.

Philadelphia, March 6.

#### At Washington.

Field Bros. say that American Beauties must have stems at least a foot in length to be salable in Washington—from two to three feet is the length demanded by many buyers; that the treatment of Am. Beauty described by Mr. May in a recent issue of the *FLORIST* is the one which will produce the best results; that La France should be grown in the same way as Am. Beauty; that a heavy mulch of manure should never be placed on the rose beds unless the plants are in very active growth; that manure which has been left in a solid heap and not turned to allow the ammonia to escape will play havoc with roses if used as a mulch; that after using such a mulch on their roses they could not raise anything—not even a smile.

Mr. R. Pollock, foreman for C. Strauss & Co., states that they had an excellent crop of the Puritan till Jan. 1, and after that date the flowers nearly all came deformed—they will continue growing it, but have lost faith in the rose; that they have tried Princess Beatrice this winter and so far found it worthless; that they find they can cut three Bon Silenes to one Contier from an equal space; that the Am. Beauty pays as well as any rose they grow; that they are but little troubled by deformed flowers from the much abused Perle; that steam heating is very satisfactory to them.

#### At Philadelphia.

Robert Craig says that he can cut Am. Beauties with nearly all the stems over a foot in length from plants which have been bent down hybrid fashion; that Princess Beatrice is a good rose, but worthless for forcing—has tried it extensively without success; that by bending hybrids down the period of bloom is lengthened—the end shoots flower first and those lower on the cane later; that manure for mulching should be spread outside and well worked over several times before being used; that Meteor—a very dark crimson—is fine for summer blooming either out of doors or under glass, that it is a good shipper and there is money in it as a summer rose, but that it is poor for winter work; that there is

no pink hybrid as early as Mrs. John Laing, that it can be had in bloom as early as November and there is money in it as an early hybrid—from a house started up last September he cut flowers early in December—he will plant another house with Laing for next season; that he has found Contier on the whole more profitable than Bon Silene, as when well grown it blooms as freely as Bon Silene and the flowers bring a better price; that Charles Anderson kept a record of the buds cut from a house of Bons and another of Contiers—both houses of equal size—and the Contiers were ahead in quantity; that Contier continues salable to June and later, while the Bon comes poor as soon as weather is warm; that the Contier's greatest fault is that it sheds its lower leaves, this he thinks is from the Bourbon blood received from one of its parents, if kept in vigorous condition it holds its leaves well but if allowed to run down it drops its leaves badly; that he prefers raised beds for winter and solid beds for summer work; that Etoile de Lyon is the best yellow outdoor rose we have; that tea roses should never be mulched unless growing vigorously; when roses require feeding he prefers to give them manure water made from sheep manure, if that is not to be had cow manure is the next best thing; that Dinsmore has few equals as a bedding rose but that it has no value for forcing—it is in the way of Mme. Chas. Wood but is a better grower out of doors; that he is favorably impressed with Mrs. Ethel Brownlow—it is in the way of Mermet but of a brighter color; that the Bennett is one of our most profitable forcing roses—he prefers it on its own roots; that it is doubtful as to whether there is any value in Countess of Folkestone; that he likes Sunset and believes it will grow in favor, though it produces about as many "ball-heads" as does the Perle; that Queen of Queens is one of the very best pink roses for pot plants or outdoor bedding, every shoot bearing a bud—but of no use for forcing; that Malmaison makes a grand pot rose.

Robert Dennison says that Princess Beatrice is the "meanest" rose he ever had; he tried a hundred plants for forcing and says his hundred dollars is permanently "planted"; he has built a bench over the plants and won't even take the trouble to lift and pot them. He thinks that the soil has less to do with the thriftiness of his Bennetts than careful treatment.

Edwin Lousdale says poor buds will come on Am. Beauty and that they should be pinched off as soon as seen; that steam is better than hot water; that he don't believe in mulching; that Luizet is one of the most profitable hybrids to force. He has a house of Luizets that are in splendid shape. His Beauties are also extra fine, and his new houses are models in every respect.

John Burton has a large house of Asparagus tenuissimus, which he grows as easily as smilax. He has Bennetts which are now three years old and looking finely. They are lifted, new soil put in the benches and the plants replanted each year. Age is of value in the Bennett, as it is a rather slow grower.

Chas. F. Evans thinks that one great cause of failure with Her Majesty is in endeavoring to force it before the shoots are sufficiently ripened. Mrs. John Laing certainly looks very promising as seen at his houses. Mr. Evans says that he planted a house last May with plants from 4-inch pots; they were dried off in August, started Sept. 17; that he com-

menced to cut flowers Nov. 23 and crop continued to Jan. 6. He says that he can cut two Bon Silenes to one Gontier from an equal space; that Princess Beatrice is a failure with him. His houses of Puritan are looking well, the plants are in vigorous condition, and but few deformed flowers were to be seen. It certainly appears to be a fairly profitable rose as seen at his place.

#### At New York.

Ernest Asmus does not have his walks strewn with tobacco stems. He ties the stems up into little bundles and distributes them at intervals on the surface of the beds. This makes the walks much cleaner and avoids the "mushy" walks frequently made by wet tobacco stems. He has the Bride in splendid shape and considers it a very profitable rose, but thinks that the old Niphetos bears enough more flowers to pay a little the best. He grows both largely. He says there is more money in Magna Charta than in Beauties for him; that he prefers to feed his plants with liquid manure rather than to mulch them; that while some Puritans come deformed, he cuts many good ones, but there is no money in them at the price they are now bringing in the market; that he can cut at least two Bons to one Gontier from an equal space, and can cut more Perles than Gontiers from a given space of each; that there is more money in the Bon than Gontier; that Gontiers must have bottom heat to do well; that Mme. Cusin is the most profitable rose he has; that it is as free as Bon Silene, holds its color well and is the best keeping rose grown—the petals will rot on the stem before they will drop; it should be treated same as Bon Silene; that Comtesse de Frigneuse is not a bad rose, but it will never take the place of the Perle.

Tony Schultheis says that he tried Rosa carolinaensis as a stock, but has discarded it; that it takes the buds all right, but suckers so bad that it is worthless.

Charles Anderson thinks Souvenir d'un Ami is the most profitable pink rose for forcing, and the only one that can be cut and shipped every day the year through. He grows them well, bent down in the same manner as hybrids; they are in a center bench, and it is done so they will not shade the back bench. One range of houses is at present connected by gutters. They will be rebuilt this summer and a space left between each house, for as now built the snow will lay on the lower part of roof. Mr. Anderson says that when a man becomes too well satisfied with himself and his methods he is getting in prime condition to make a fool of himself; he knows this from experience. He says that any manure which smells enough to be offensive is injurious to a rose; that a mulch means something to retain moisture or arrest radiation from the surface of the ground, and as such is an injury in dark weather; that he feeds his plants with fresh liquid cow manure much diluted, adding a little guano when the manure is somewhat spent; that he has tried bone dust as a fertilizer in various ways and in large and small quantities, but could never see that it had any effect either for good or evil; that hot water under pressure as arranged at his place is very satisfactory, a 2-inch pipe of this being equal to a 4-inch pipe without pressure, and costs only about one-half as much as the old style, also that it is better adapted to an extension of the system after once up; that he will plant seven or eight thousand Gontiers for

next season—he "just wants to see somebody run down the Gontier and other growers throw it out. It will be money in our pocket." He regards Mme. de Watteville as a very valuable rose for forcing; says it is as free as Mme. Cusin, with a better and more constant color, retains its shape and ships better; will go into it heavier next season. On March 6 blooms of Watteville were bringing double the price of Mermets. He thinks that the Puritan can be profitably grown at \$25 a hundred, but not for less; that its points of excellence are its erect habit of growth, freedom in flowering, fine foliage and fragrance; its defects are its liability to produce malformed flowers, lack of beauty in form—the more it expands the more it departs from the ideal form—the curling of its petals and bruising easily. He believes that by propagating from selected wood the rose can be improved; that the stock now in the market has been propagated largely from wood which had borne malformed flowers. He thinks favorably of Ulrich Brunner as a forcing rose. His hybrids are all forced in pots, and he moves them from the cold house to warmer ones as required, so that he has one three-quarter span house full of blooming hybrids all winter. He planted a bunch of Perles claimed to have been propagated from plants which had not been forced, and they did not do nearly as well as the poorest of those propagated from forced wood, though in the same house and under the same conditions. After a house of roses is planted he makes a note on the end of the house of the number of each variety planted in that house, with date at which they were planted, which makes a very convenient reference. He says there is no money in American Beauty for him, and that he has tried Princess Beatrice and thrown it out. He considers the Bride a very profitable rose, but he can still get more money from a house of Cooks than one of Brides, due to the fact that but a limited quantity of Cooks are now grown and they therefore bring much higher prices. The pinkish shade seen in the Bride during dark winter weather detracts from its value, though it is on the whole a remarkably fine rose. He does not look for perfection in any rose, and believes there never will be a perfect rose. He forces Merveille de Lyon considerably.

John Smith, foreman for John H. Taylor at Bayside, says that they have had less bull-head flowers on their Perles this year than last. He has the Perles on some benches tied down hybrid fashion where there is a lack of head room. The Perles seen here were in best condition of any noted around New York. He forces Niphetos two years and gets larger buds from 2-year old plants. He uses no mulch except in hot weather, feeding with liquid manure and bone dust. Says that he can cut more Gontiers than Bons from a given space and get more money for the buds; that they will plant Watteville and Cusin largely for next season; that they have thrown out Frigneuse and don't think much of Puritan. The Gontiers at Mr. Taylor's were in magnificent condition—best of any seen at any place visited. The Perles also were extra fine; to look at a house of Perles here one would imagine that "the disease" was a myth. Their roses are fed with liquid manure once a week when making rapid growth—otherwise but little is given. Most of the hybrids grown here are forced in 7-inch and 8-inch pots; this necessitates a great deal of work in mov-

ing the plants from house to house as a higher temperature is required, but gives more uniformly satisfactory results, especially in getting in a crop at a specified time and where it is not desired to bring in a very large crop at one time. The tank for liquid manure is heated by steam pipes which run through it, and the liquid is pumped by steam power and delivered to the beds through rubber hose. The place is heated by two immense Exeter steam boilers, and the boiler pit is a model of neatness and convenience as compared with the average greenhouse stoke hole.

John N. May's well-known place at Summit was visited, but as he is such a regular correspondent of the FLORIST we made but a few notes, as follows: He finds Cusin a very popular and profitable rose, as it lights up so well at night, and it blooms with great freedom. He has thrown out Puritan—not because it don't grow and bloom satisfactorily, but because it don't sell readily in the market, even when well grown. He likes the Duke for blooming from October to December, but considers it of no value in spring. He uses no mulch deeper than one inch, and doesn't want any horse manure in the houses. His record of receipts from each variety of rose grown shows that Bon Silene is in the lead as the most profitable rose so far this season. Two new roses with which he is favorably impressed are Edmund de Biazau—pink, with a bronze tint—and Souvenir de Admiral Courbet—almost as large as Gontier, deeper in color and blooms remarkably free. Cut blooms of the Bride and Bennett seen in his cellar were certainly magnificent—buds averaging from two to two and one-half inches in length and without a blemish on either flower or foliage.

De Forest has not found American Beauty profitable so far, but with commendable tenacity proposes to keep on trying, feeling that if his neighbors can make it profitable, he can also. Here the White Mermet is seen in its glory. It strongly resembles the Bride, though a slight difference in form is noted on close inspection. Mr. Lyon stated that they had cut nineteen blooms from each plant of La France up to Feb. 1. A number of houses of which the framework was entirely of iron were remarkably light and will undoubtedly last many years.

At T. J. Slaughter's, Madison, N. J., the American Beauty is seen at its best. In vigor of growth and freedom of bloom but little more could be asked. James Monahan, Mr. Slaughter's foreman, says they give the Beauty exactly the same treatment as the tea roses; that drying it off or resting is all folly; that treated as a tea and kept growing continuously every shoot will bear a bud; that the Beauty pays as well as any rose they grow, and that plants of the Beauty will produce \$5 worth of bloom in a season. They have Beauties and Mermets growing together in the same house, both in extra fine condition. In a house of Mermets planted Aug. 17 last the plants will average four and one-half feet in height. Mr. Monahan don't believe in mulching except to protect the surface of the soil in hot weather. He feeds with liquid horse manure, preferring it to that from cow manure; the horse manure should be turned frequently till the hot ammonia is expelled before being safe to use. He likes to have his beds fairly well dried out every second day during the winter. He states that he is pleased with the Bride, that it pays well; that



Puritan has done fairly well with them, but that it don't take well in the market. He has Hermets tied down hybrid fashion where there is a lack of head room, and they do well. A house of Brides planted from 6-inch pots July 2 last now average six feet in height, dressed with beautiful foliage clear to the bench—some of the plants are a good nine feet high—and bear large quantities of handsome blooms. An immense pile of sod for next year's use is protected from the weather by a shed.

Louis M. Noe has three houses built last summer, the stock in which is looking remarkably well. His American Beauties which were planted in the house July 6 last are very satisfactory. He keeps them growing continuously the same as his teas.

W. H. Ryan at Chatham has five houses of well-grown roses. A lot of Brides propagated Feb. 22 last, planted on benches July 6, now average five and one-half feet in height, well dressed with foliage and blooming with great freedom. A house of Hermets planted from 2-inch pots Aug. 20 last now average four feet in height. Mr. Ryan thinks that a low temperature adds to the color of the Mermet. His Contiers were also in most excellent condition.

#### Some Conclusions.

That Princess Beatrix is practically dead as a forcing rose; that roses should not be fed by a mulch of any kind, as they can be handled more intelligently and consequently more successfully without it; that a mulch should be used only to prevent rapid evaporation of moisture; that many growers owe their failure to overfeeding at a time when the plants are not in sufficiently active growth to assimilate the food; that American Beauty is on the boards for a long run, and that it will pay to study its peculiarities in order to achieve success; that the Bennett is a grand rose when well grown, and that success depends not so much upon any particular soil as upon careful and intelligent management—magnificently grown Bennetts were noted doing equally well in soils of widely diversified character; that the Perle still holds its own as our only profitable yellow forcing tea rose; that it will pay unsuccessful growers to spend less time hunting for soil and more time in attending to every little detail of their business, many of which are now neglected; that Mme. Cusin is going to be a very profitable rose—its remarkable freedom of bloom, good color, excellent shipping qualities and docile nature in the forcing house will make it so; that the Bride is going to be a stayer; that it will be many a day before Niphotos is discarded; that Mme. de Watteville is a very promising variety; that Bon Silene won't be thrown out in a hurry, though Contier will be liberally grown; that success can be reached by as many different routes as there are successful growers—for no two of the latter seem to agree on all points, though the general direction is the same; that the trade will divide more and more into specialties, and that it is well for it to do so, especially in the neighborhood of large cities; that the rose is still the "Queen of flowers" in the opinion of flower buyers, and that it will remain so for an indefinite period.

**BULL-HEAD PERLES.**—W. J. Palmer of Buffalo says that while he gets deformed flowers from his young plants, his old plants produce perfect blooms.

#### Malformed Perles.

As some errors occurred in Mr. W. W. Coles note on this question in last issue we quote it again as corrected:

"Considerable difference of opinion exists as to the cause of malformed flowers of the Perle. To my mind there are several causes: Wherever we see Perles growing very strong and rank we see a good percentage of bull-heads. Less strong feeding will overcome this. Again, warm treatment will be found beneficial, and I really think that a low temperature is one of the principal causes of malformed flowers. The soil also has its influence; in a very strong growing soil the evil is quite noticeable."



FLOWERING BRANCH OF ERICA PERSOLUTA ALBA.

#### The Puritan.

I should feel exceedingly small were the insinuations that Mr. Chitty advances well founded. With due respect to him and also his opinions of the Puritan rose, (my own judgment to the contrary notwithstanding), my opinion has some solid foundation. Although the rose houses under my charge would compare in extent with those of many leading rose growers in the country, yet I am not a commercial florist—only a private gardener. It can therefore be readily seen that it is to no interest of mine to boom up the Puritan rose. In my visits to other establishments where this rose is grown, I find the results much varied. The denunciation my friend gives it

would in some cases be fully deserved—possibly in his own. At others I found it fair to look upon, and in many respects a good rose. During the dull season there will appear some malformed buds, but those I nip off as soon as noticed.

The Puritan is an extremely strong grower, and in its efforts to develop the bud, if not sustained, the buds will almost invariably become deformed. I mean by this that the shoots starting out below the bud as low as it is intended to cut, should be taken out. It also requires ample nourishment as with all strong growers. I believe it will gain in favor as we become more acquainted with it. To day, March 15, I cut thirty-two finely developed buds with stems averaging fourteen inches in length, and thought compassionately of my friend Mr. Chitty and his "ghastly looking" products. So much for the Puritan, which when well developed has a noble bearing; but when placed side by side with the dear, modest Bride, we cannot help but say, "we would be happier by far, with either, were't other dear charmer away." THOS. FOULDS.

#### Heaths.

I have sent to your address by mail to-day samples of heaths—*Erica persoluta alba* and *Erica melanthera*—from plants a year old. Mr. Campbell grows them quite extensively; we have at least 100 plants in 6-inch pots fully thirty inches high and eighteen inches through, one mass of flowers, and they last at least from four to six weeks in good condition. Some of the older plants are four feet high and as much through. These useful plants are very little seen nowadays, and I think it would pay florists to grow them in quantity, for I know of nothing that gives as much satisfaction. These beautiful heaths are very useful, and massed with such good things as *Dendrobium nobile*, *D. Wardianum*, *Cyclogyne cristata*, cyclamens and grand cinerarias such as are grown here, is a sight never to be erased from the memory.

Utica, N. Y.

THOS. PATTISON.

#### Forcing Liliun Candidum.

In answer to Inquirer in last number of AM. FLORIST I will give my mode of treatment, and am convinced that he will have better success in the future if he will follow directions. I have grown *L. candidum* under glass for the last twenty years or longer (never on a very large scale, but from 100 to 500 a year), and at first had, like Inquirer, rather discouraging experience. We had no journals then such as the FLORIST, where anybody could ask for information and where we could find ready reply. I also doubt whether anybody could have given a satisfactory answer at the time, as there was then but very few of the florists engaged in forcing *L. candidum*. But persevering, I improved after a few failures, and for the last fifteen years have bloomed every bulb I selected from three different batches planted in open ground.

I take up the oldest lot of bulbs when the stems begin to show signs of decaying after blooming; select the best bulbs and plant two of them in a 7 inch pot, the latter to have two inches of drainage in the bottom and filled with ordinary good sandy loam, without any addition of stimulants. I then bury the pots over the rim in an open sunny situation, give them a good watering and let them alone until frosty weather. Later planting is not advisable, as *candidum* will make a

fall growth, and this should be made in the pots, as we want to save this growth as well as the roots made at that period.

Success depends on having the plants in a healthy condition by Nov. 1, when they may go in ordinary greenhouse temperature—say about 50°. More heat may be given after the stems begin to develop, when also a light stimulant may be given once or even twice a week in the shape of manure-water. I force no imported bulbs, but first plant them out in open ground for one or even two years, because they are very sensitive to being kept out of ground for even only a week or two, and I never can tell how long they have been out of ground, even if I buy of dealers here in this city. To keep down green fly, which attacks lilies in preference to any other plant under glass, I prefer to place tobacco stems between the pots or under the benches than to smoke the house. Inquirer's bulbs were certainly planted too late to insure good success, and the soil may have contained too much manure.

Rochester, N. Y. JOHN B. KELLER.

#### Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1887.

April 1—Tem., morning 40°, noon 44°, evening 36°. Wind W. to E. Continued dividing, potting and plunging in hotbeds *Alternanthera aurea* and *versicolor*—potting in rose pots. Planted daisies and pansies in cold frame. Potted rooted cuttings of coleus.

2—Tem. 41, 47, 50. SW., SE., SW. Same as yesterday.

3—Tem. 40, 76, 68. S. Sunday.

4—Tem. 29, 39, 27. NW. to N. Continued dividing, potting and plunging *alternantheras* in hotbeds. Laid temperate hotbeds for geraniums.

5—Tem. 20, 39, 32. NW. to SE. Same as yesterday.

6—Tem. 37, 48, 40. SE. to E. Divided, potted and plunged in hotbeds *Alternanthera amena* and *latifolia*. Potted little tuberous begonias in thumb-pots. Potted rooted cuttings of coleus.

7—Tem. 38, 45, 39. E. to NE. Potted and plunged lobelias in hotbeds. Commenced repotting and plunging geraniums in hotbeds. Repotted *tropeolums* into 3-inch pots. Shaded glass front of palm house with paint.

8—Tem. 39, 49, 47. SE. Same as yesterday, and prepared more temperate hotbeds for geraniums.

9—Tem. 56, 80, 74. SW. Continued repotting and plunging geraniums. Prepared more temperate beds for same. Potted rooted cuttings of abutilons. Sowed fern spores.

10—Tem. 59, 80, 74. SW. Easter Sunday.

11—Tem. 44, 45, 39. N. Continued repotting and plunging geraniums in hotbeds. Divided and potted *Achyranthes Lindenii* in 3-inch pots. Cleaned winter coverings from rose beds, clematis and hollyhocks. Glazed broken sashes in frame yard.

12—Tem. 56, 83, 63. SW. to SE. Trimmed and tied standard roses. Continued repotting and plunging geraniums in hotbeds. Trimmed *alyssums* and *gnaphaliums*.

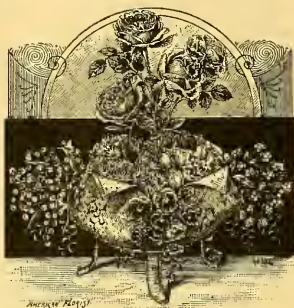
13—Tem. 45, 55, 60. NE. to SE. Same as yesterday, and sowed in cold frame seeds of *portulacca*, *zinnias*, *balsams*, *asters*, *ipomceas* and *celosias*.

14—Tem. 65, 76, 74. S. Continued repotting and plunging geraniums. Divided and potted *Achyranthes Lindenii*. Prepared more hotbeds for geraniums.

15—Tem. 58, 54, 49. W. to N. Same as yesterday, and potted single dahlia seedlings. Cleared frame yard of manure surrounding frames.

#### An Easter Basket.

This is a white enameled basket standing on gilt feet. The body of the basket is formed from a square piece of woven willow. The four corners are drawn up from the center and are turned over, making four pockets. The edges of the basket are all gilt bound. The pockets are filled with spring flowers, a drooping cluster of lily of the valley, having in the opposite pocket one of *myosotis*. Pansies stud another pocket, with daffodils opposite. In the center of the basket there are daisies and tulips with hybrid



AN EASTER BASKET.

roses rising from the middle. This is one of the most elegant designs for a souvenir of the season, and is introduced by Brower of New York.

#### Boston.

The blizzard which struck many of the eastern cities so severely was quite moderate in its dealings with Boston, and but little permanent damage was done to greenhouses or stock.

The effect of the storm on the flower trade was to cause quite a stagnation and overstocking of goods, as owing to the blockading of the railroads nothing could be sent away.

Lily of the valley, tulips, hybrids and *jacqs* are all very abundant and prices are low. Lilies of all kinds are coming in freely, and there is not a great scarcity of anything at present, although a heavy Easter trade will no doubt clean out some varieties pretty thoroughly. W. J. S.

#### The Great Storm.

The genuine Manitoba blizzard which has played such havoc in the east first made itself apparent in the vicinity of New York about midnight of Sunday, March 11, and lasted all day Monday, Monday night and a good share of Tuesday. During the first thirty-six hours of the storm the temperature was very nearly down to zero all the time. The snow drifted badly, and from Sunday night till Thursday morning railroad transportation in this section was practically stopped. Flowers which florists succeeded in shipping Monday were not delivered in the city till Thurs-

day morning. While the damage to greenhouses was considerable, there is general surprise that it was no worse.

J. N. O.

#### New Orleans.

Conrad Koeniger, the able gardener for Dr. T. G. Richardson, has taken unto himself a wife, and expects to establish himself on his own account.

E. Baker has sold out his establishment and retired to the country.

R. E. Simons has established a nursery at the old place of E. Baker on Henry Clay avenue.

Chas. Eble has opened a florists' store at 4 Camp street, and is doing well.

R. Maitre has removed his store to 140 Canal street, in the Pickwick Club building.

Fonta & Wilson have a city depot for the sale of plants at 4 Camp street.

C. Thomas is fitting up a nursery near the old exposition grounds.

J. Fonta built a large rose house 20 x 200 feet last fall, also three other large houses. He makes a specialty of roses, begonias, palms and ferns; has done a fine business this season.

J. Eblen, Jos. Muller, C. Holst and J. H. Menard have made large additions of glass to their already extensive establishments.

J. H. Menard is kept busy booking orders for his two new hybrid roses, and expects to sell at least 8,000 this season.

V. Valentine, one of our oldest landscape gardeners, has retired from business on account of old age.

Richard Ory is now manager of the Elks nursery.

Paul Scholz is now gardener to A. C. Hutchison, Esq.; F. H. Schmidt to H. T. Cottam, Esq.; and Louis Knauf to the Hon. J. D. Houston.

H. A. Despommier is laying out a park 500 x 1000 feet with miniature lakes, etc. for J. L. Harris, Esq., above Baton Rouge, La.

The cut flower trade has been quite brisk this season, but the prices have been low, roses blooming out of doors nearly all winter. H. A. D.

#### For Decreased Postage on Plants and Seeds.

The Senate postal committee has unanimously reported a bill to make the postage on seeds, plants, bulbs and cions one cent for each four ounces (four cents per pound), instead of one cent for each ounce (16 cents per pound) as at present. The majority of the house postal committee have reported the same bill, but fixed the rate one cent for each two ounces (eight cents per pound), but a strong minority of the House committee report in favor of the 4-cent rate.

The prospects are therefore bright for the passage of the bill in the Senate at the 4-cent limit. But to get that rate in the House, more work is needed. Write at once to your congressmen and to both your senators at Washington, urging their support of the 4-cent per pound postage bill. If you have already written, send another note reiterating your request that they support the bill which provides for a 4-cent per pound rate. Now is the time your efforts and influence will be felt.

**SURPLUS STOCK.**—If you have any surplus stock or stock of any kind you wish to sell at wholesale, advertise it in the FLORIST.



## News Notes.

DETROIT, MICH.—The Detroit Floral Co. have opened a store at 197 Woodward avenue.

BUFFALO.—W. J. Palmer has opened a branch store under the Genesee house, with his son in charge.

PLATBUSH, N. Y.—Among the principal sufferers from the storm, by falling roofs under the weight of snow, are the sons of Wm. Bennett, C. F. Wulf, Kretschmar Bros. and P. B. Meissner.

LOUISVILLE, KY.—The Louisville Floral and Hort. society contemplates holding an exhibition of flowers and plants next September upon a scale larger than has yet been attempted in the south.

CHICAGO.—The wife of Frederick Brookes, the son of Chicago's pioneer florist, died March 13. W. J. Stewart of Boston was in the city March 15. Wm. Schindler, a west side florist, is dead.

CHATHAM, N. J.—W. H. Ryan started in here last fall with five rose houses, 120 x 18 each. Mr. Ryan is probably one of the youngest rose growers in the United States, being but 20 years of age.

NYACK, N. Y.—J. Winterbottom will build two 150-foot houses for violets and carnations this season. The rose growers of Nyack are beginning to fear that they may lose their soil, especially when they see it carried away by the satchel full.

MADISON, N. J.—James Mouahab, who has been foreman for T. J. Slaughter for a number of years, will start in business for himself here this summer. Louis M. Noe is a new rose grower here. He has three large houses and his stock is in fine condition.

LEXINGTON, KY.—Mr. D. Honaker, the florist who mysteriously disappeared from his home about fourteen months ago has returned. His health is greatly impaired. The disappearance created a decided sensation at the time, as no reason was assigned for his leaving.

NEW HAVEN, CONN.—An employe of florist Frank S. Platt was imprisoned in the greenhouses nearly two days during the big storm, by snow which had collected in immense drifts around the place. When dug out he was weak from his long fast and pretty well scared.

GREENWICH, CONN.—One of the greenhouses belonging to Alexander Mead was crushed by the weight of snow on the roof March 12, during the recent blizzard. Damage to houses and stock about \$1,000. The houses were connected together by gutters, and between some the snow lay nine feet deep.

WORCESTER, MASS.—The exhibition of the Hort. society, March 15, was one of the best "openings" in the history of the society. Mr. H. F. A. Lange captured all the medals offered by the "General Union of Holland" for bulbs in bloom. Among many other attractions was a fine display of blooming orchids.

CLEVELAND.—Robert Hughes will remove from his old place on Euclid avenue the coming June. He has purchased land on Prospect street east of Wilson avenue, and will erect greenhouses there soon. J. C. Gooding & Co. is the name of a new firm composed of Messrs. J. C. Gooding, David Charlesworth and W. J. Leitch. The greenhouses are on Crawford road and the store at 210 Sibley street.

LOUISVILLE, KY.—"The Kentucky Florists' Society" has been organized and twenty-five members enrolled, with more to come in at the second meeting. Officers have been elected as follows: A. Neuner, president; A. Lauer, vice-president; H. J. Lichtfeld, secretary; Henry Nanz, treasurer. Meetings will be held the first Tuesday of each month.

WINNIPEG, MANITOBA.—At the second annual meeting of the Manitoba Floral Association, held March 6, officers for the ensuing year were elected as follows: C. J. Brydges, president; W. B. Scarth, first vice-president; J. R. Davidson, second vice-president; J. Cape, secretary and treasurer. The treasurer's report showed that the association was in healthy financial condition. It was decided to hold the annual flower show the third week in August next.

## SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order.

SITUATION WANTED—By a well experienced hand in store, also greenhouse; best references. Address J. S. ZACHARY, 627 DeKalb Ave., Brooklyn, N. Y.

SITUATION WANTED—As gardener; age 24; has thorough practical knowledge of his profession; can be highly recommended. A. T. PETERSON, Box 126, Riverside, Ill.

SITUATION WANTED—By a first-class rose-grower and plantman, etc.; best of references; private or commercial. Address C. C. care American Florist.

SITUATION WANTED—By a first-class gardener; man of long practical experience in all branches of horticulture; married, without family. Address FRED WENZIG, Watertown, New Jersey.

SITUATION WANTED—By a Scotch gardener; sound; thoroughly experienced in all branches of the gardening and florist profession. Address FLORIST GARDENER, Postoffice, Elgin, Ill.

SITUATION WANTED—By a first-class gardener; single, German, 12 years' experience, competent in all its branches; commercial or private; latter preferred. Address M. L., care American Florist.

SITUATION WANTED—As foreman in a commercial place; thoroughly understands the shipping business; good cut flower worker; single; age 30 years. Address M. E., care American Florist.

SITUATION WANTED—By a young man as florist; understands propagating especially and growing roses; has had good experience. Address, stating salary, GEO. F. KIEBS, care Mrs. Willis, Versailles, Ky.

SITUATION WANTED—By a first-class commercial man, as rose-grower and propagator or foreman; thoroughly understands growing and forcing roses and other cut flowers. Address H. M. FITZGERALD, Fitchburg, Mass.

SITUATION WANTED—As gardener; understands greenhouse and stove plants. Orchids specialty. Years' experience in the great Sander Orchid Nursery, St. Albans, England. Address J. A. FITZGERALD, Fitchburg, Mass.

SITUATION WANTED—As gardener or florist; by an Englishman 20 years of age, married; has had 10 years' experience in some of the best establishments in England; to include the management of the stock. Box 25, Amesbury, Mass.

SITUATION WANTED—By single man as first or second assistant in commercial greenhouse—any place in the west. Responsible and trustworthy. Best of references and character and ability. Address M. E., care American Florist, Chicago.

SITUATION WANTED—Foreman in good commercial place; first-rate grower of all plants, roses especially; cut flower designs; 25 years' experience; age 35; married. Can take entire management. H. K., P.O. Box 817, New York City.

SITUATION WANTED—By a young man willing to make himself useful, also collector of plants; has a good practical knowledge of growing plants and flowers; 10 years' experience in this and old country. References furnished. Address JAMES McMECHAN, Galesburg, Ill.

SITUATION WANTED—By a competent man, married, with 3 years' experience in all branches of his profession, as manager or head gardener of either commercial or private place. References preferred. No small place accepted. Address COMPETENT, care American Florist.

SITUATION WANTED—On a gentleman's place as head gardener, thoroughly conversant with all branches of the profession; has made a special study of orchids and fancy plants, and has collected them in South America; served time with Hon. Erasmus Corning of Albany, N. Y. Married, small family; best of references. Address B. M. GIBBY, (care Wm. Grey), Kenwood, Albany Co., N. Y.

SITUATION WANTED—By single man, strictly temperate, 12 years' experience, offers his services to florists. An experienced rose and general plant grower—none but those requiring services of a thorough man need reply, and those replying will please state terms. Address L. Florist, West Chester, Pa.

SITUATION WANTED—By experienced florist and gardener of 30 years' practice; single middle aged man; first-class rose and cut flower grower; excellent experience in vegetables and lawn. Capable of taking charge of commercial or private place. References first-class. Address GUST SEHNHARTER, 134 N. 6th St., Philadelphia, Pa.

SITUATION WANTED—By a first-class young do-ris, Danish, single, industrious, honest, active, reliable, sober and intelligent; understand all branches as gardener and florist; first-class rose and variation grower and general stock; the taste in making up floral designs and arranging flowers for decoration; also understand bookkeeping; best references; commercial place preferred; only those wanting a first-class man need apply. Address H. N. HANSEN, N. Y. M. C. A., Watertown, N. Y.

WANTED—An assistant gardener at a private place—a young man with 2 years' experience. Apply to T. BENTON LEITER, Room 4, 81 S. Clark St., Chicago.

WANTED TO LEASE—Greenhouses, with house and ground, in vicinity of New York; must be in good condition. Address COMMERCIAL, Am. Florist, Chicago.

WANTED—Man to work at once in small greenhouse and vegetable garden. State wages—which must be paid. Address M. R. SAUNDERS, Bradford, Stark Co., Ill.

WANTED—A man competent to grow cut flowers and plants; must be temperate; must be strictly temperate. State wages and where formerly engaged. Address M. E. HUTCHINSO & Co., Watertown, N. Y.

WANTED—A first-class and experienced propagator of roses, carnations, geraniums and broad-leaved evergreens. State salary, and where formerly employed. Address CALIFORNIA NURSERY CO., Niles, Alameda Co., Cal.

WANTED—Partner in general nursery and greenhouse business in Florida; established 45 years; must have a pretty thorough knowledge of the business, and at least \$3,000 capital. For particulars, address J. A. CARE, American Florist.

WANTED—All florists to know the Syracuse Pottery Co. is running day and night trying to fill its cash orders. Freight reduced 10 per cent. March 5. Rate to St. Louis 2c. During March and April only cash orders can be filled. Read our advertisement. Address J. N. PERKINS.

FOR SALE—The best retail florist's and seedman's business in the Northwest (population 150,000). Reason for selling, with full particulars furnished on application. Address BATA, care American Florist, Chicago.

FOR SALE—Established florist's business; small capital required; if not sold will lease on very favorable terms; proprietor engaged in other business. Correspondence solicited; will pay investigation. Address CHARLES S. HART, Watertown, N. Y.

FOR SALE—Good-paying old florist business; 3 brick greenhouses, newest improvements; brick building, large stock; on a block, one of the best centers of city of 10,000 inhabitants; rare chance for a gardener; sold cheap; good reasons for selling. Address A. B., American Florist, Chicago.

FOR SALE—Very desirable florist business, established 1876; only florist store in the heart of the city; greenhouses less than a mile distant; nearly 100,000 square feet of glass; splendid local and shipping trade; city 45,000 population. Rare chance; good reasons for selling. Address MAC, care American Florist.

FOR SALE, OR TO LET—A florist establishment, situated in one of the most popular parts of Brooklyn, L. I., comprising six (6) greenhouses with steam heating, and a large cold storage house. One of said houses stocked with forty odd camellias. Also dwelling house, stable and sheds. Size of ground, 100 ft. wide by 100 ft. deep. Address J. G. L. BOTTICHER, 35 and 37 Kent Ave., Brooklyn, L. I., N. Y.

## FOR SALE

At a bargain, in a town of 20,000 inhabitants, an old established florist's establishment, consisting of 3 acres of land, four brick dwelling houses, one very stable, wagon shed, etc., three greenhouses well stocked, heated by hot water, hotbed sash, etc. All in excellent condition. Can be reached in one hour from St. Louis by three different railroads. For further particulars apply to

Michel Plant and Seed Co., 718 Olive St., St. Louis.

## GREENHOUSE FOR SALE

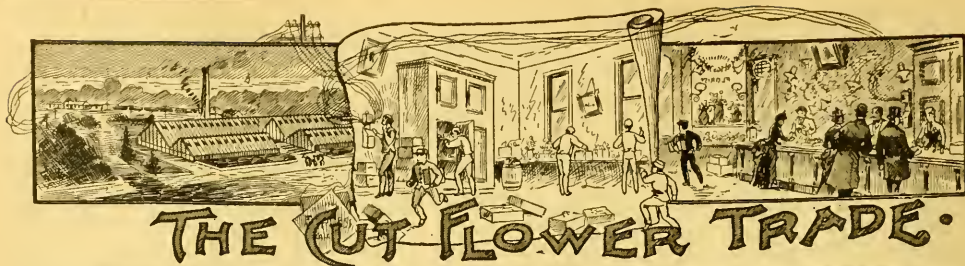
Belonging to the late Alexander Greenlaw, in Braintree, Mass., ten minutes to station on C. & N. R., four greenhouses, one cold storage house, one in Tew's house, one in Hydrick, one Pink house; one Violet house. Each 130 feet long. Town water on the premises, recent improvements. Can be reached in one hour from St. Louis by three different railroads. For further particulars apply to

Price of house.....\$2,000.  
Price of cottage.....500.  
Price of greenhouses.....500.  
Or will sell whole for.....7,000.

HOLBROOK & FOX,  
12 Postoffice Square, BOSTON, MASS.







### Easter Floral Fashions.

Styles for Easter, the grandest floral festival of the year, have rarely been so expensive and beautiful. While there are very few set pieces, arrangements are hold and clear. Better taste characterizes the work of our florists this season than has ever before been the average in the metropolis. Orders are very few for designs, even for memorial altar pieces. Florists suggest some chaste arrangements at a certain position on the altar or in the chancel, which is far more effective than a basket or design which is almost lost to sight among other flowers.

Plants enter more largely into altar and room embellishments than previously. The massing of cut blossoms around the base of pulpit, font and lectern is done away with, and instead a charming intermixture of blooming plants and vines is made. Rhododendrons and azaleas are enhanced by a half veiling of soft greenery. An exquisite church decoration is made by a gothic screen of cyperus which entirely covers the rear wall of the altar. Among the grassy foliage lilies are placed and branch out so that their beautiful cups and comely clusters are seen in clear relief. *L. Harrisii* and *L. candidum* prevail. The highest plants should be placed in the center, and lilies are more effective in this position than other flowers. Font, pulpit and lectern are trimmed with asparagus, with the plant group rising up from the base. White flowers take the lead and form the main decoration of altars. Lilacs, pale purple rhododendrons and delicate pink azaleas edge the arrangement, and whatever memorial effects are made are done in strong colors if so desired. For instance, a little group of certain flowers particularly loved by the one remembered rise from an ivy base. There are always places on the altar where a neat floral effect adds to its elegance.

Decorations of drawing rooms for Easter weddings will show a great profusion of vines with a glaring cluster of brilliant blossoms from under these, such as tulips, genesta or hybrid roses. Mantelpieces are shrouded with strings of foliage which, in the high Queen Anne sorts, are fastened in the center at the top, trail down, and between the curtains rises the floral effect. Old-fashioned mantel shelves have a vine draping which is drawn back, and the bloom rises from the fireplace between the parted greenery. On the center of the shelf a blooming plant is placed of harmonious color, the pot being bound with the moire sash of Easter lily white.

Brides' gowns for the fortnight following Easter will be trimmed with lily of the valley almost exclusively. One or two of the brides will wear white lilacs, but the favorite flower is lily of the val-

ley for dress ornamentation. A sash which is very narrow at the left shoulder and widens until it meets the skirt drapery at the right side is composed of the flowers. The foundation of the sash is soft silk, and it falls loose from across the corsage. This is a lovely garniture and easily applied.

Boxes the shape of an egg have been ordered for cut flowers for Easter gifts. These boxes are white satin and come in several sizes as ordered. Only novelties in the floral line are put in them, and not roses; white stocks, white violets, lilies, snowballs and gardenias are arranged so that each flower looks as if it had grown where placed. The box is tied with Easter lily white ribbon. On some of these boxes is stamped in gold script a suitable motto. FANNIE A. BENSON.

New York.

### New York.

Mr. Court of London is in the city. Mr. Peter B. Mead is recovering from a severe illness.

The first auction sale of orchids this season was held March 6.

Klunder rented a large house on Fifth avenue in which to hold his Easter show of plants.

Mr. and Mrs. Peter Henderson and Mr. and Mrs. Wm. Barr started for Florida March 7.

The spring auction sales have so far been unusually successful, and stock has brought good prices.

*Pteris tremula* is imported from Bermuda. The large cut fronds are very handsome and decorative.

C. L. Allen delivered an interesting lecture before the Farmers' Club March 6 on selection in relation to seed growing.

Carl Jurgens and Wm. McCloud of Newport and J. B. Murdoch of Pittsburgh were taking in the sights in the vicinity of the city recently.

The demand for artificially colored flowers is about ended. As soon as the public understood that they were dyed they were no longer wanted.

John Logan, formerly gardener to Mrs. Stevens, has engaged with Whitelaw Reid, editor of the New York *Tribune*, and is to have superintendence of his extensive acres.

The meeting of the Florists' Club which should have been held the 14th inst. did not take place on account of the snow blockade making it impossible for members to be present.

John Thorpe is going in heavily to forcing peaches. Amateur horticulturists, as well as professionals, have caught the craze for growing vegetables and fruit in hothouses.

Siebrecht & Wadley had intended holding a rose show March 20, but adverse weather so interfered with the supply of

selected stock that they have postponed it until after Easter.

J. Scallon has made a star twenty-eight feet in diameter for a dinner centerpiece, which is composed of twenty sections, each one different. Two hundred bunches of heliotrope comprise one point.

T. C. Tweddle, of P. L. Bogart & Co., the Sixth avenue florists, died March 11, of pneumonia. The funeral was to have occurred on the 13th, but owing to the great storm was postponed till the 20th, when the remains were sent to Greenwich, Conn., and interred there.

There is a glut in the cut flower market, the usual dullness in business at this season causing little or no demand, and there being a great supply of bloom. Good American Beauty roses sold for six cents each at the Thirty-fourth street ferry this morning (March 21) and Jacqueminots for two cents.

Among the sufferers from the late blizzard were John Finn, Louis Meyer of Staten Island, Peter Henderson, Alfred Edwards, W. C. Wilson, Bailey Leech, James Taplin and Bennett's Sons, Flatbush, all of whose greenhouses were more or less damaged. Peter Henderson probably met with the largest loss.

### New York Retail Prices.

Perles, Niphetos, Souvs, \$1 to \$1.50 a dozen; Gontiers, \$1 to \$2; Brides, \$3 to \$4; Niels, \$3; Mermets, Jacqs, \$1 to \$3; La France, \$5; hybrids, \$3, \$6 and \$9, according to quality; gardenias, \$2; tulips, hyacinths, daffodils, lily of the valley, \$1; pansies, 25 cents; mignonette, \$1.20 to \$1.50; Neapolitan violets, 75 cents to \$1 a hundred; Maria Louise violets, \$1 to \$1.50 a hundred; smilax, 40 cents a string; Asparagus tenuissimus, 75 cents a string; A. plumosa, \$1 a string.

FLATS of blooming tulips, hyacinths and other bulbs assist greatly in making a brilliant display in the windows of many eastern florists' stores. The blooms are cut as wanted, and buyers feel better to think that they are cut fresh from the plants in their presence. Flats of blooming snowdrops were noted at Small & Son's, at Washington.

A FIRM of NEW YORK florists have obtained \$148.72 worth of experience from E. Berry Wall, the well-known New York dude. He gave it to them in the shape of orders for costly boxes of flowers. They have obtained a judgment for the amount of their bill, but it remains unsatisfied, as E. Berry has nothing that can be levied upon except his nerve, which he carried with him when he left.

WHITE CHENILLE is appropriately used for lettering funeral designs.

**THE AMERICAN FLORIST**

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 Cents a Line, Adgate;  
Inch, \$1.40; Column \$14.00.  
Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per  
cent; 12 months, 20 per cent.

No reduction made for large space.

The Advertising Department of the AMERICAN  
Florist is for Florists, Seedsmen, and dealers in  
wares pertaining to those lines ONLY. Please to  
remember it.Advertisements for April 15 issue must  
REACH US by noon, April 9. Address

THE AMERICAN FLORIST CO., Chicago.

OUR ISSUE OF APRIL 15 will be of increased size, and we shall send out 2,000 sample copies—making a total issue on that date of 7,000 copies. Print your spring trade list and price lists of surplus stock in this issue. We will print your list and circulate it to 7,000 wholesale buyers for less money than the postage alone would cost you, and in addition the FLORIST is preserved for reference which would be the case with but very few of your lists otherwise mailed. A whole page for one insertion costs only \$12; a half page \$21; one column \$14; half column \$7. If you wish additional copies of your price lists to enclose in letters or send in response to requests, we will print them for you at the rate of \$3 per thousand and size of full page, or \$2.50 per thousand if of smaller size; not less than one thousand at this rate. We believe that we can save you money and secure you far better returns by this means. Try it! Copy of advertisements for April 15 issue should reach us as early as possible—the earlier the better—and not later than April 9.

**Catalogues Received.**

D. M. Ferry & Co., Detroit, Mich., seeds; Ellwanger & Barry, Rochester, N. Y., roses, fruit and ornamental trees; P. J. Berckmans, Augusta, Ga., plants; R. J. Halliday, Baltimore, Md., wholesale circular plants; Gould's Mfg. Co., Seneca Falls, N. Y., spraying pumps and garden engines; Michigan Lake Shore Seed Co., South Haven, Mich., seeds and plants; Max Deegen, Jr., Kostritz, Thuringia, Germany, plants, bulbs and trees; Ketten Freres, Luxembourg, Europe, new roses; W. W. Coles, Lansdowne, Pa., chrysanthemums and roses; Selover & Atwood, Geneva, N. Y., nursery stock; Henry Moore, Memphis, Tenn., plants; W. A. Burpee & Co., Philadelphia, seeds; Drumm & Baker Bros., Fort Worth, Tex., plants and seeds; E. L. Koethen, Zanesville, O., plants; L. D. C. Hopkins & Son, Cortland, N. Y., plants and seeds; Harkett's Floral Nursery, Dubuque, Ia., plants; B. P. Critchell & Co., Cincinnati, plants and seeds.

BEAUTIFUL PANSIES.—A quantity of flowers of very large size and handsome colors and markings have been sent us by Mr. W. F. F. Murray, Atco, N. J., who states that the plants were raised from home grown seed. The flowers sent were equal in size and beauty in color and shadings to any we have seen.

**DO NOT FAIL TO SEND FOR OUR NEW CATALOGUES.**  
Just published, containing the latest information which every planter should have and which cannot be found elsewhere. No. 1, Fruits, 48 pages, 10c; No. 2, Ornamental Trees, etc., illustrated, 136 pages, 15c; No. 3, Strawberries; No. 4, Wholesale; No. 5, Roses, 28 pages free. Nos. 1, 2, 3 and 5 bound together in cloth, forming a complete manual for reference, 50c.  
**ELLWANGER & BARRY, Mount Hope Nurseries, ROCHESTER, N. Y.**

**Wholesale Markets.****Cut Flowers.**

	BOSTON, March 26.
Roses, Teas	\$2.00 @ \$3.00
" Perles, Niphotos	6.00 @ 8.00
" Mermets	8.00 @ 10.00
" Jacquets	12.00 @ 15.00
" Hybrids	12.00 @ 25.00
Carnations, short	1.50
" long	2.50
Callas	12.00
Candids	3.00
Longhorn	20.00
Spiraea	2.00 @ 3.00
Smilax	18.00 @ 20.00
Adiantums	1.50

	NEW YORK, March 26.
Roses, Bon Silene	\$2.00 @ 3.00
" Perles, Niphotos	3.00
" Souvs, Gontiers	3.00
" Mermets, Cousins, Brides	3.00
" La France	6.00 @ 8.00
" Bennetts	3.00
" Am. Beauties, Puritans	15.00
" Jacquets	8.00
" Hybrids	10.00 @ 30.00
Carnations, long stems	1.50
" short stems	1.00
Mignonette	2.00
Smilax	35.00
Hyacinths, narcissus	3.00
Lily of the valley, tulips	3.00
Viola	.50
Gardenias	dozen 1.00

	CHICAGO, March 27.
Roses, Perles, Niphotos	4.00 @ 5.00
" Bon Silenes	4.00 @ 5.00
" Mermets, Brides	8.00
" Bennetts, La France, Dukes	8.00
" Am. Beauties, Jacquets	18.00
Carnations, short	1.50
" long	2.00 @ 2.50
Smilax	25.00
Lily of the valley, daffodils	5.00
Roman hyacinths, narcissus	5.00
Viola	.75
Callas	22.00
Adiantum ferns	1.00
Candids	12.50 @ 15.00

	PHILADELPHIA, March 26.
Roses, Teas	\$3.00
" Bennetts	8.00
" Mermets, Jacquets	15.00
" Perles, Souvs	5.00
" Niphotos, Bon Silenes	4.00
" La France	12.00
" Am. Beauties, Puritans	20.00
" Guillots	8.00
" Gontiers, Brides	12.00
" Magna Charta	25.00
Carnations	.75 @ 1.00
Lily of the valley	5.00
Dutch hyacinths	8.00
Harrisii lilies	20.00
Callas	20.00
Smilax	30.00
Viola, single	per bunch .25
" double	.50

Business quiet and flowers plentiful.

## WM. J. STEWART, Cut Flowers & Florists' Supplies

WHOLESALE  
67 BROMFIELD ST., BOSTON, MASS.

CHAS. E. PENNOCK,  
WHOLESALE FLORIST,  
38 SO. 16TH STREET,  
PHILADELPHIA, PA.

Mention American Florist.

CUT FLOWERS AT WHOLESALE  
N. F. MCCARTHY & CO.  
WHOLESALE FLORISTS,

63 Bromfield St., under Hori. Hall, Boston, Mass.  
We have made large contracts with the best Rose growers about Boston to handle their entire stock this season. Our stock will consist of Papa Gontier, Bennett, Pierre Guillott, American Beauty, Mermets, La France, Malmesbury, Cook, Bride, Niphotos, Perle, Niel, Anna Webb and Grace Wilder pinks, long stems; other flowers in variety. We shall have a particularly large lot of Mermets and Perles, so that in sending to us when you fail to get them elsewhere you will feel reasonably sure of getting them. Unknown parties must give satisfactory reference or let us send C. O. D. Write for information.

**Best Hardy Rhododendrons,**

Azaleas, new Japanese Maple, Tree Peonies, Lilac Syringa Japonica, Prunus Pissardi, Hydrangea Panchicola, Ampelopsis, Clematis, and all other choice HARDY Trees, Shrubs, Roses, etc., in any quantity at lowest rates.  
COLLECTIONS OF BEST HARDY SHAUBS very low and cheap. Catalogues on application.  
**FRED. W. KELSEY,**  
308 Broadway, NEW YORK.

Thos. Young, Jr., &amp; Co.,

**Wholesale Florists,**

INCORPORATED 1885,

20 W. 24th ST., NEW YORK.



W. S. ALLEN,  
WHOLESALE DEALER IN CUT FLOWERS,

36 EAST 23rd STREET, NEW YORK.

ESTABLISHED 1877.

Price List sent upon application.

LaRoche & Stahl,  
Florists & Commission Merchants

CUT FLOWERS,  
1237 Chestnut Street, PHILADELPHIA.  
Consignments Solicited. Special attention paid to shipping. Mention AMERICAN FLORIST.

C. STRAUSS & Co.,  
TELEPHONE 977. BOSTON, D. C.  
WHOLESALE ROSE GROWERS

AND DEALERS.

LARGE STOCK OF ALL THE NEW ROSES.  
Orders booked for young stock at special rates.

GEO. MULLEN,  
17 CHAPMAN PLACE, (near Parker House),  
BOSTON, MASS.  
WHOLESALE AND COMMISSION DEALER IN  
Fresh Cut Flowers & Florists' Supplies.

Flowers carefully packed and shipped to all points in Western and Middle States.  
Orders by Telegraph, Mail, Telephone or Express promptly attended to.

HAMMOND & HUNTER,  
Wholesale dealers in  
Cut Flowers & Florists' Supplies  
61 West 30th Street, NEW YORK.

WELCH BROS.,  
WHOLESALE FLORISTS,  
165 Tremont Street, BOSTON MASS.  
We make a specialty of shipping choice Roses and other Flowers, carefully packed, to all points in Western and Middle States.  
Return Telegram is sent immediately when it is impossible to fill your order.

KENNICOTT BROS.,  
WHOLESALE FLORISTS.

ALL CUT FLOWERS IN SEASON.

Write for price list. Consignments solicited.

27 Washington Street, CHICAGO.

**CUT FLOWERS**

The choicest Cut Flowers at lowest market rates shipped C. O. D. Telephone connection. Use A. F. Code when ordering by telegraph. For prices, etc., Address,

J. L. DILLON, BLOOMSBURG, PA.

M. MALSH,  
206 S. Halsted Street, CHICAGO.  
WHOLESALE DEALER IN

CUT FLOWERS,  
AND GROWERS' AGENT.

Regular shipping orders especially solicited.







**TRY DREER'S GARDEN SEEDS**  
Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free.  
**HENRY A. DREER, Philadelphia.**

**SIBLEY'S TESTED SEEDS**  
Catalogue Free! Containing all the latest novelties and standard varieties of Garden, Field and Flower Seeds. Gardeners everywhere should consult it before purchasing. Stocks pure and fresh, prices reasonable.  
Address: **Hiram Sibley & Co., Rochester, N. Y., or Chicago, Ills.**

**THE BEST AND CHEAPEST DOUBLE PETUNIA SEED**

(*P. hybrida grandiflora fl. pl.*)

in the market. For sale to the trade by the grower.

**G. A. McTAVISH, NORTH SAANICH, B. C., CANADA.**



**NEW CARMINE FORCING RADISH**

The Best Novelty of the Day.

Ready in 3 weeks; beautiful carmine, round as a ball, solid fl., icy-crisp, delicious, semi-pungent flavor.

A breakfast dainty, and the only astringent radish ever produced.

The small, tender type of the preceding spring radish.

For details, direct from the grower, send for the new catalogue and mention this paper. Per oz. 10c; 1 lb. 25c; 1 lb. 50c. Postpaid.

**A. D. COWAN & CO., 114 CHAMBERS ST., NEW YORK.**

"Garden and Garden" says, "A. D. Cowan & Co., among other good things, catalogue Carmine Forcing Radish, which we consider very earliest in existence." Send for illustrated catalogue and mention this paper. Per oz. 10c; 1 lb. 25c; 1 lb. 50c. Postpaid.

**A. D. COWAN & CO., 114 CHAMBERS ST., NEW YORK.**

**Florist's Letters.**

PATENT APPLIED FOR.

These letters are made of the best immortelles, wired on wood or metal frames with holes to insert toothpicks.

Prices on Wood Frames:

2in. purple...per 100, \$3.00

2 1/2 in. ....per 100, 4.00

Send for sample. Postage 10c. per 100. Script lettering on Metal Frames any word, 5c. per letter.

Designs, Monograms, Etc.

**W. C. KRICK,**

1107 Broadway, Brooklyn, N. Y.

**M. M. Bayersdorfer & Co.,**

Phila., Agts. for Penna.

**J. C. VAUGHAN, Chicago.**

Agg. west of Pennsylvania.

**A. T. MERRICK,**

**\*HORTICULTURAL ENGRAVER\***

113 ADAMS STREET,

CHICAGO.

**BURPEE'S FARM ANNUAL FOR 1888**  
Will be sent FREE to all who write for it. It is a Handsome Book of 128 pp., with hundreds of illustrations, Colored Plates, and tells all about the BEST GARDEN, FARM, and FLOWER SEEDS. Bulbs, Plants, and Valuable New Books on Garden & Flower. It describes Rare Novelties in VEGETABLES and FLOWERS, of great value, which cannot be obtained elsewhere. Send address on a postal for the most complete Catalogue published to **W. ATLEE BURPEE & CO., PHILADELPHIA, PA.**

**PLANET JR. GARDEN DRILLS, WHEEL HOES, HORSE HOES, FIRE FLY.**  
Each one of these POPULAR TOOLS has been either REMODELED or IMPROVED. They are more complete, practical, and strong than you can imagine; so look them over carefully.  
NEW STYLES. NEW PRICES. **S. L. ALLEN & CO., Patentees & Mfrs., 127-129 Catharine St., Philadelphia, Pa.**

**SIBLEY'S SEEDS**  
THE SIBLEY SQUASH.  
The FINEST WINTER TABLE or CANNING SQUASH on record. Introduced this season, with Other Novelties of Rare Merit. The handsomest, most complete and comprehensive Catalogue that has appeared this season. Address  
**HIRAM SIBLEY & CO., ROCHESTER, N. Y. AND CHICAGO, ILL.**

**NORTHERN CROWN MARKET GARDEN SEEDS**  
CRASS SEED  
OATS CORN WHEAT POTATOES  
LEONARD'S BRIDGEPORT DRUMHEAD  
Are what every one wants who exports to make a success of Gardening. Our **VEGETABLE SEEDS** Specialty. Our beautifully illustrated **1888 CATALOGUE** the finest ever issued, SENT FREE, describes Novelties in Vegetables and Flowers, New Field Grains, Potatoes, &c.  
**S. F. LEONARD, 149 W. Randolph St. CHICAGO.**  
Send for Catalogue

**HAMMOND'S "SLUG SHOT", GRAPE DUST, &c.**  
IN LOTS TO SUIT THE TRADE.  
**J. C. VAUGHAN, Chicago. PLANT SEED CO., St. Louis. J. M. McCULLOUGH'S SONS, Cincinnati. J. A. SIMMERS, Toronto. Ont. J. R. & A. MURDOCH, Pittsburg. A. W. LIVINGSTON'S SON, Columbus, O.**  
And by Eastern Wholesale Seedsmen.

**W. W. RAWSON & CO.**  
34 South Market Street, Boston, Mass.  
Importers and Growers of Garden, Field and Flower Seeds:  
SUCCESSORS TO **B. K. BLISS & SONS, formerly of New York.**  
Our large and profusely illustrated Catalogue for 1888 has been made still more attractive by the addition of a richly illustrated cover, beautiful colored plates, and numerous life-like illustrations of rare and beautiful flowers and choice vegetables, including many novelties of rare merit, will be mailed free to customers of last year, and to all others, upon receipt of Ten cents, which will be refunded with first order. **B. K. Bliss**, surviving partner of B. K. Bliss & Sons, is now with us, and respectfully solicits the patronage of former customers.

**NEW BOOKS ON GARDENING.**  
**CELERY AND ITS CULTIVATION**, by W. W. Rawson, 25 cents.  
**SUCCESS IN MARKET GARDENING and Vegetable Growers' Manual**, by W. W. Rawson. Practical Market Gardener. The most instructive work of the kind ever published, in which are given all the secrets of growing vegetables in large or small quantities. 200 pages, fully illustrated, sent post-paid, by mail, upon receipt of \$1.00.

**GOLDMAN'S ATOMIZER AND SPRINKLER**  
FOR A THOUSAND AND ONE USES.  
COMMENT UNNECESSARY  
You will not part with it.  
Practical and Useful.  
For Flowers, Window Gardening, House Plants, Destroying Insects, and for various fine sprays. Most natural substitute for fog or dew. By dipping in water while closed, fills instantly. Ball finely perforated; spray controlled by pressure of hand. Size of lemon squeezer. Weight, 5 oz. Exclusive Territory to Agents. Sold on its own merits; no talk. Sample by mail, 50 cts. This is the Atomizer that sold so well at the Danbury, Albany and other Fairs. Florists and Seedsmen, show it to your customers; sells fast; good profit. Excellent for indoor plants. Send for illustrated pamphlet and price to the trade. Mention this paper.  
**M. GOLDMUN, Manufacturer, Pittsfield, Mass.**

**SURPLUS \* NURSERY STOCK**  
40,000 EVERGREEN TREES, 10 to 15 inches high.  
ARBOR VITE PYRAMIDALIS, HOVEYI, GLOBOSA, COMFACTA, SIBERICA, AMERICAN.  
RETINOSPORA DECUSSATA, PLUMOSA AUREA, SQUAROSA.  
IRISH JUNIPER, NORWAY SPRUCE, BIOTA ELEGANTISSIMA AUREA.  
**C. RIBSAM & SONS, Trenton, N. J.**  
**PAPER SEED BAGS,** For Flower and Vegetable Seeds.  
**CLARK BROTHERS, Manufacturers, 61 Ann St., N. Y.**



**MOST EXTENSIVE STOCK**  
**JAPANESE & CHINESE**  
 Fruit Trees, Ornamental Trees,  Bamboos, Conifers, Palms, **LILY BULBS AND SEEDS.**  
 Stock carefully raised in our Nurseries in Japan.  
 H. H. BERGER & CO., 315 & 317 Washington Street,  
 S. A. S. FRANCISCO, CALIFORNIA.  
 Catalogues free. Established 1878.

## MODODENDRONS

of American grown hardy sorts.

## RED FLOWERING DOGWOOD.

And other Rare Plants.

## PARSONS & SONS CO.,

LIMITED.

Kissena Nurseries, Flushing, N. Y.

## FOR SALE.

Tea Roses and Carnations, 2 1/2 in. pots., per 100, \$1.00  
 Rooted Cuttings of Coleus's and Carnations to order,  
 \$2.00 per 100.  
 Dracena Indivisa, \$1.50 to \$2.50 per dozen

W. W. GREENE, SON & SAYLES,  
 WATERTOWN, N. Y.

## GLADIOLUS

## \* TUBEROSES

ORNAMENTAL NURSERY STOCK.

SAMUEL C. MOON,

Wholesale Nurseryman and Gladiolus Grower,  
 MORRISVILLE, Bucks Co., PA.

Dahlias, ground roots... per doz \$1.50; per 100 \$12.00  
 Peonies... per 100 \$5.00; per 1000 \$5.00  
 Climbing Roses in var... per 100, 3.00  
 Hardy Roses in var... " 10.00  
 Clematis... per doz \$5.00; " 25.00  
 Choice 2-year old grape vines: Niagara, Worden  
 Jefferson, L. Washington, Nomiol, Prentice, Pock  
 lington, Vergennes, Brighton, Moore's Early, etc.,  
 \$2.00 per ten. 1-year old vines, one-half price.  
 Hardy Clematis Bella Viticella, etc., \$1.00 per doz.;  
 \$5.00 per hundred.

F. A. BALLER, Bloomington, Ill.

## CHRYSANTHEMUMS.

I have a fine collection for florists' use, and  
 can sell them my selection at \$3.00 per 100; and  
 \$25.00 per 1000.  
 Send for Wholesale Price List.

W. W. COLES,

LANDSDOWNE, PA.

## \* CHRYSANTHEMUMS \*

Send for Catalogue of over 100 varieties, including  
 many newer kinds. \$3.00 per 100.

H. L. PHELPS, Springfield, Ill.

**NEW JAPAN PINK.** The seed of  
 this Pink has been procured direct from the south of Japan  
 through the importing house of H. H. Berger & Co.  
 of San Francisco, who recommended it as a new  
 large, flowering variety. The flowers are three  
 inches in diameter and of the most lovely colors.  
 Mixed colors, etc.

**GLORIOSA PERFECTA PANSY.** This is  
 the finest colored German Pansy in cultivation.  
 If you do not find it so I will refund the price.  
 100 seeds 25c.

**LORENZ NEW ZINNIA.** The finest  
 of all the Zinnias. In the original cut, eight colors mixed.  
 25c. Price list of choice Flower Seeds free.

CHARLES L. BURR,  
 SPRINGFIELD, MASS.

10,000

## ECHVEVERIA SECUNDA GLAUCA

Per hundred, \$3.00.

CHARLES HEINZ, SHARON, PA.

ROYAL PALM NURSERIES.

Fresh seeds of Sahal Palmatoe - The Trade  
 only, @ \$1.50 per lb. (1 lb by mail add 10c. for postage.)  
 Prudans Little (creeper fine), \$1.50 per lb. Both  
 of above in 20 lbs. by express or freight for \$27.00 and  
 \$28.00 respectively. Address at once.  
 REASONER BROS., Manatee, Fla.



## WHITE WATER LILY ROOTS

(Nymphaea Odorata.)  
 \$5.00 per 100. The Trade Supplied.  
 WM. F. HALSEY,  
 WATER MILLS, LONG ISLAND, N. Y.

## WATER LILIES.

All Colors. Also

## CAPE COD PINK POND LILIES,

— 8 HARDY. —

Send for Catalogue.

BENJ. GREY, MALDEN, MASS.

## Cape Cod Pink Pond Lily

For price list, Plants and Cut Flowers,  
 address the original cultivators.

## CHIPMAN BROS.,

Sandwich, (Cape Cod,) Mass.

## CHOICE STOCK

— FOR —

## FLORISTS AND NURSERYMEN.

VERBENAS, strong and healthy, mammoth  
 strain and varieties of our own growing.  
 ready to bloom, 2 1/2 inch pots... \$30.00  
 2,000 Large Chestnut, 6 to 8 inches... 12.00  
 2,000 " 10 to 15 inches... 15.00  
 Forest grown Hard Maples, 6 to 10 inches... 2.00  
 2,000 Missouri Seed Currant, 1 year... 25.00  
 1,500 strong 1 year Delaware Grape... 40.00  
 10,000 Cuthbert and Brandywine Raspberry... 5.00  
 15,000 Taylor Frootie Blackberry, the best... 10.00  
 2,000 Marlbore Red Raspberry... 10.00  
 5,000 Black Walnut, 3 1/2 to 5 feet... 25.00  
 5,000 Black Walnut, 2 to 3 feet... 25.00  
 Purple leaf Nerberry, 8 to 10 inches... 15.00  
 200 Aristolochia Sipho, 2 years... 10.00  
 500 Hydrangea, P. 4, 10 to 15 inches... 7.00  
 500 Niagara White Grape, 2 years... 20.00  
 500 Niagara White Grape, 1 year... 12.00  
 200 Pyramidal Arbor Vite, 20 to 25 inches... 15.00  
 2,000 Clematis Virginia, 1 year layers, nice... 5.00

D. LEE & SON, Madison, Ohio.

Mention American Florist.

## IMPORT BULB PRICES.

We are Large Dealers in all

## FORCING BULBS.

And ask the opportunity to make  
 prices on your list.

Please write us for Estimates now.

J. C. VAUGHAN, <sup>BOX</sup> 688 **CHICAGO.**

## LAWN GRASS SEED

Neatly put up in pound and half pound boxes for  
 florists' retailing. PRICES, \$2.25 and \$1 25 per doz.  
 pkts., or in bulk at \$2.00 per bushel.

## LILY AURATUM, DAHLIAS,

—) AND ALL SPRING BULBS. (—)

Choice Seeds for MARKET GARDENERS'  
 and FLORISTS' use.

Send for Catalogue and Trade List.

JAMES KING.

170 Lake St. CHICAGO.

## ROFFEA

(FOR TYING)

## IN ANY QUANTITY.

BY THE POUND, BALE OR TON.

## M. B. FAXON,

— SEEDSMAN —

21 South Market Street, BOSTON, MASS

SEND FOR NEED CATALOGUE.

## TO THE TRADE.

Per 100  
 Roses—Princess Beatrice, 2 1/2 in... per doz. \$2.50  
 " Mermata, Souv. d'Am. Ami. Perles, Ni-  
 phelou, Queen's Scrolllet, &c., 3 1/2 in... \$ 8.00  
 " 1 1/2 in. good var. and fine plants, 3 1/2 in... 10.00  
 Carnations—Snowdon, Hime's White, Century... 3.00  
 " new and rare, 12 var... \$8.00 to 8.00  
 Chrysanthemums—40 fine var., 2 1/2 in... 3.00  
 " last year's, 2 1/2 in... per doz. \$2.00 to 10.00  
 Heliotrope, 3 varieties... 4.00  
 Double Poinciana, the best varieties... 4.00  
 Lemon Verbenas... 5.00  
 Fine Verbenas, all in bud... 3.00  
 " somewhat smaller... 2.50  
 A few sets of Henderson's New Mammoth  
 Verbenas... per set \$1.50

## BROWN & CANFIELD.

527 WALNUT ST. SPRINGFIELD, ILL.

Rooted Cuttings of leading sorts Coleus, strong  
 and clean... per 100, \$ 1.25  
 Rooted Cuttings, \$1 per 100 extra potted... " 4.00  
 Swanley White Violets... " 75  
 Vinca major var., 2 1/2 in. pot... " 4.00  
 Tuberosa Bulbs, 4 in. circum. & over... per 1,000, 10.00  
 " 3 in. to 4 in. circum... " 8.00  
 " sets, clean... " extra " 10.00  
 Begonia Saundersonii, 4 in. pots... per 100, 8.00  
 " Metallica " " " 3.00  
 Heliotrope, Chieftain, best market sort... " 3.00  
 Bouvardia, Davidson, best single white... " 3.00  
 Send for trade list of general florist stock.  
 JOHN CURWEN, Jr., Villa Nova, Pa.

**AUGUST RÖLKER & SONS,**  
44 Dey St., NEW YORK.  
Supply the Trade with  
**SEEDS, BULBS,**  
And all kinds of  
**FLORISTS' SUPPLIES.**  
1888 Trade List for Seeds now ready.

**BULBS, IMMORTELLES.**  
**J. A. DE VEER,**  
(Formerly of DeVeer & Boomkamp.)  
19 Broadway, New York.

SOLE AGENT FOR  
THE GENERAL BULB CO., Vogelenzang, (Holland.)  
Ls. BREMOND FILS, Ollioules, (France.)

Offers to the trade, not without engagement, for prompt or Spring delivery. Per 100. Per 1000.  
Lilium Auratum, large bulbs..... \$9.00 \$80.00  
Excelsior Pearl Tuberoses, extra..... 1.75 15.00  
" " First size..... 1.50 12.00  
Gladioli, large bulbs, fine mixed..... 1.50 12.00  
" " Brenchleyecosis..... .50 7.50  
" " scarlet & crimson..... 1.00 9.00  
" " pick & variegated..... 1.75 15.00  
" " white and light..... 2.25 20.00  
" " yellow and yellow..... 2.50 22.50  
Hyacinthus Candicans, large..... 2.50 20.00  
Dahlias in fine sorts, undivided roots..... 15.00 2.25  
" in separate colors..... 12.00 1.75  
" in fine mixture..... 9.00 1.25  
Crocus..... 5.00 .75  
Catalium Esculectum, large bulbs..... 12.00 1.75  
" good sized bulbs..... 7.00 1.00

QUOTATIONS ON ROMANS.  
PAPER WHITE NARCISSUS.  
LILUM CANDIDUM, ETC.  
NEW CROP GIVEN ON APPLICATION.

## \*TUBEROSE BULBS\*

We are the largest growers in the country, and offer the best quality

PEARL TUBEROSES . . . . . per 1000, \$20.00  
DOUBLE . . . . . 20.00  
\$2.50 per 100 in small lots.

Trade List mailed free.  
HENRY A. DREER, Philadelphia.

**A SPECIALTY.**  
**SEEDS FOR FLORISTS**  
CAREFULLY SELECTED.

And from which the best results may be expected.

ASTER, New Pearl, pure white . . . . . PKT. \$ 25  
" " bright rose . . . . . 25  
" " Boston Florist's, pure white . . . . . 10  
" " fine rose . . . . . 10  
" " Zingiebel's, white . . . . . 10  
BALSAM, Snow Ball, finest double white . . . . . 15  
PANSY, Improved Giant, best strain in cultivation . . . . . 50  
STOCKS, Boston Florist's Double white, superior to, and producing a larger per cent. of double flowers than any known strain . . . . . 25  
STOCKS, Crimson King, finest double crimson . . . . . 15  
Our strains of Cinerarias, Cyclamens, Calceolarias, Primulas, Mimulus, Verbenas, and Zinnias are of very superior selected strains.  
EXCELSIOR PEARL TUBEROSES, \$1.50 per hundred, \$15.00 per thousand.  
Wholesale price list for florists now ready. Send one.

**SCHLEGEL & FOTTLER,**  
26 S. Market St., BOSTON, MASS.

**ROSES. ROSES. ROSES.**  
At \$4.00, \$5.00 and \$6.00 per hundred.

**GERANIUMS**  
At \$3.00 and \$4.00 per hundred.

**COLEUS**  
At \$2.00 and \$3.00 per hundred.

**HELIOTROPE**  
At \$2.50 per hundred.

Fine stock of VERBENAS, at \$2.50 per hundred, \$20.00 per thousand.

Send for new Spring List if you have not received one. Address

**GEO. THOMPSON & SONS, Louisville, Ky.**

## OUR WHOLESALE CATALOGUE

— OF —

# BULBS

Of all Sorts,

## CHRYSTANTHEMUMS, &c.

Is now ready. Will be sent to all applying that we know to be engaged in the trade—or to any furnishing us evidence, as cards, letter-heads or bill-heads.

**V. H. HALLOCK & SON,**  
**QUEENS, NEW YORK.**

**F. E. McALLISTER,**

— WHOLESALE DEALER IN —

Seeds For the Florist Market, Gardener and Farmer. Requisites Such as Baskets, Immortelles, Grasses, Mosses, Bouquet Papers, Pampas Plumes, etc. Bulbs For the Greenhouse or Garden.

22 Dey Street, - - - NEW YORK.

**SEGERS BROTHERS,**  
GROWERS OF  
**HOLLAND BULBS.**  
OUR SPECIALTIES ARE.

Holland Hyacinths and Tulips, in any quantity; also Crocuses, Narcissus, Daffodils, Liliums, Lily of the Valley, Gladiolus The Bride, Anemones, Ranunculus, Spiræa Japonica, etc.

References as to quality of our Bulbs, etc., to several United States Florists and Seedsmen.

Send for Wholesale Catalogue.

**LISSE. NEAR HAARLEM, HOLLAND.**  
WHOLESALE ONLY. NO AGENTS.

**SEEDS, BULBS, PLANTS,**  
SUPERIOR NORTHERN GROWN.  
**CURRIE BROS., SEEDSMEN AND FLORISTS,**  
Send for Catalogue. **MILWAUKEE, WIS.**

**RELIABLE SEEDS FOR FLORISTS.**  
ZIRNGIEBEL'S Improved White Aster.  
— Improved White Perpetual Stock.  
— Improved Giant Candytuft.  
— Improved Giant Trimardeaux and Bugnot Fancy Pansies.  
Trade packages of any of the above seeds, \$1.00 each.  
**DENYS ZIRNGIEBEL, Needham, Mass.**

## DUTCH BULBS.

**JOHN BARTH. BOS,**  
OVERVEEN, near Haarlem, HOLLAND,  
LONGEST GROWER OF  
HYACINTHS, TULIPS, NARCISSUS, LILIES  
and all sorts of forcing bulbs.  
Trade Catalogue FREE on application.

**EVERGREENS**  
Both native and nursery grown.  
Forest Trees and Tree Seeds.  
Immense quantity, lowest prices.  
Wholesale list, describing all leading varieties, free. It will pay you to send for it. **UECKE BROS., Seymour, Wis.**

**E. M. KRELAGE & SON,**  
HAARLEM, HOLLAND.

Largest collections and stocks of Bulbs of all kinds: Hyacinths, Tulips, Crocus, Narcissus, Fritillaria, Anemones, Ranunculus, Liliums, Gladiolus, Iris, Amaryllis, Pæonia, Ixia, and miscellaneous articles in greatest variety. Clivia, Tritoma, Muscari, Lily of the Valley, spiræa (Houtteia), Dielytra, etc. Largest collection of Strawberries. Novelities in the Bulb line.

Wholesale catalogue is sent on application and as long as not published special offers will be given in sorts and quantities required are stated.

E. H. KRELAGE & SON are now booking orders for Roman Hyacinths, Double Roman and Totus Albus Narcissus, Jonquils and other southern articles. Special prices on application.

**NO AGENTS.**

Mention American Florist.

## TO EXCHANGE.

Verbenas—Rooted Cuttings or pot plants for small Roses. See adv. in another column.

**WM. DESMOND,**  
KEWANEE, ILL.



## Buffalo.

Palmer is showing some nice Jacqs. now.

G. D. Hale succeeds to the business of J. Hale.

Jno. Speiss, Jr. has opened a branch on William street, in East Buffalo.

E. J. Buxton has his new place on Ferry street, in Black Rock, in full growing order.

Katoll finds natural gas too much of an experiment, and some big bills. "Coal for me next winter" he says.

Most all interested ones say trade was quiet during January. Entertainments numerous enough, but not of the classes that demanded great quantities of flowers.

Tulips, narcissus, hyacinths, before, behind and on all sides. Will they all sell at fair prices or is a break in prices coming, is now the solicitous question.

Long thinks he is holding his own, and has extended his lease in the Tift House block three years longer. No reports from Palmer as yet on the branch in the Genesee. Scott is about moving into larger quarters at 479 Main street, nearly across from his old location.

## CANNAS! CANNAS!

Cannas, best strong bulbs.....per 100 \$2.00  
Gladioli, mixed, best....." 2.00  
Double Dahlias, strong bulbs....." 4.00  
Single Dahlias, strong bulbs....." 4.00  
Swanley White Violets, strong....." 2.00  
Pansies, best German....." 2.00

W. G. EISELE, Long Branch Village, N. J.

Now offered for the first time. **ELLWANGER & BARRY,** A valuable new Grape.  
**THE MILLS GRAPE**  
Circular with full particulars by mail free. **MT. HOPE NURSERIES** Handsome and of fine Quality.  
Rochester, N.Y.

## TO THE TRADE!

## Two New H. P. Roses

SPECIAL AWARD FROM THE

New Orleans Hort. Society, Mar., 1887

## DUC DE GALESE,

Bright Pink, a good bloomer and very fragrant.

## PRINCE BORGHESE,

Dark Velvety Red, a good bloomer and very fragrant.

PRICE LIST—Plants 12-in. \$1.00 each; 24-in. \$2.00 each

10,000 Plants now ready for delivery.

## J. H. MENARD,

HORTICULTURIST,

DRYADES STREET, between Valmont and Dulossat,  
CITY DEPOT, cor. Delord and St. Charles Ave.

NEW ORLEANS, LA.

Please Mention American Florist.

## E. BENARD,

ORLEANS, FRANCE.

ROSES ON THEIR OWN ROOTS  
A SPECIALTY.  
NURSERY STOCK OF ALL DESCRIPTIONS.

For particulars apply to

E. BENARD, JR., NILES, CAL

## Wm. H. Moon's Tree Catalogue

of Fruit and Ornamental Trees, Shrubs, Small Fruits,  
Grape Vines, etc. 32 pp. free to all. Morrisville, Pa.

## ROSES

## FOR SPRING SALE AND EARLY PLANTING.

PERLES, 2 in., strong.....\$5.00  
3-in., ".....8.00  
MERMETS and BRIDES, 2-in., strong.....4.00  
3-in., ".....8.00  
BENNETTS, good, 2-in, strong.....6.00  
3-in., ".....10.00  
AMERICAN BEAUTY, 2-in., strong.....5.00  
3-in., ".....10.00

A fine assorted lot of good market sorts ready for sale at once. 4 in. pots, \$15 per 100

**CHRYSANTHEMUMS**, Christmas Eve, Moonlight, Jessica, Elaine, and other good whites for early or late blooming, \$3.50 per 100, \$30 per 1000. One hundred other sorts of Chrysanthemums very fine kinds, all true to name, \$3 50 per 100, \$30.00 per 1000.

Send for Wholesale List.

## CRITCHELL &amp; CO.,

CINCINNATI, O.

## A LARGE SURPLUS STOCK OF VERBENAS.

Every plant in Strong and Healthy.

THE VARIETIES ARE UNSURPASSED.

Light and careful packing. Satisfaction guaranteed.

Plants.....per 100, \$2.00; per 1000, \$20.00

Rooted Cuttings....." 1.00; " 5.00

L. D. C. HOPKINS & SON, Cortland, N. Y.

## VERBENAS.

Our Verbenas are free from mildew; perfectly healthy, and variety of color unsurpassed.

Per 100, 1.00

Fine Collection, stock plants, 40 varieties, \$3.00; \$25.00

Mammoth Set, stock plants.....4.00; 30.00

Pelargoniums, in fine collection.....5.00; 50.00

Coleus, rooted cuttings, fine collection, 1.25; 10.00

Gernaniums, double and single, from pots, 4.00; 35.00

Amelopsis (Vetchin, pot-grown, \$6 to \$8 per 100

CHRYSANTHEMUMS (Fine collection for bedding and forcing, \$4 per 100; \$30 per 1000)

ROSES (Bon Silene, 8 d'ne Ami, Pearl, Safrano, Niphetos, etc., from 25¢

inch pots, \$5 per 100; \$45 per 1000.

Brides, from 24-in. pots.....per 100, \$6.00

Papa Gentler....." 8.00

CARNATIONS, ROOTED CUTTINGS.

Edwards, Peerless, Hinz's White, Jas. Garfield, and Portia, \$2.00 per 100; \$15.00 per 1000.

Wholesale list of other Roses, Carnations, Rooted Cuttings, and general florists' stock on application.

I. C. WOOD & BRO., Fishkill, N. Y.

## 100,000

## VERBENAS.

THE CHOICEST OLD AND NEW VARIETIES.

Fine pot plants.....\$2.50 per 100; \$20.00 per 1,000

Rooted cuttings....." 1.00; " 5.00

NO RUST OR MILDEW.—

Packed light, and Satisfaction Guaranteed.

J. L. DILLON, Bloomsburg, Pa.

## VERBENAS

In 2-inch pots, first-class.....per 1000 \$15.00

ADDRESS J. G. BURROWS, FISHKILL, N. Y.

## M. B. FAXON'S SPECIALTIES.

ASTERS,

PANSIES, \*

SWEET PEAS,

\* \* \* NASTURTIUMS. \* \* \*

## M. B. FAXON, SEEDSMAN.

21 SOUTH MARKET STREET.

BOSTON, MASS.

Send for Catalogue of Seed Specialties.

## FRAU EMMA TOPFER.

\* STORM KING FUCHSIA. \*

No florist can afford to be without this matchless variety. Our Mammoth stock is UNSURPASSED, and every plant is warranted TRUE TO NAME.

Price.....per 100, \$5.00; per 1000, \$40.00

L. D. C. HOPKINS & SON, Cortland, N. Y.

## VERBENAS.

PANSIES, HINZE'S WHITE CARNATIONS.

AND:

General Assortment of Plants, clean and healthy.

JUNIPERS AND ARBOR VITAE.

Rooted Cuttings and Trees from 1 to 3 ft.

Can use Palms, Roses, Dahlias and Snowden Carnations in exchange.

JOSEPH HEINL, Jacksonville, Ill.

## VERBENAS

## A SPECIALTY.

Largest and best stock in the country. Free from all disease.

MAMMOTH SET. Also some of the Best Old Sorts.

50,000 MAMMOTH WHITE.

Add 10 cents per dollar's worth if sent by mail.

VERBENAS.....per 100 per 1000

From pots.....\$ 3.00 \$25.00

Rooted Cuttings....." 1.00 5.00

COLEUS.....2.50 20.00

From pots.....1.00 8.00

PANSIES, transplanted....." 1.00 8.00

W.M. DESMOND,

Henry Co. KEWANEE, ILL.

Mention American Florist.

## VERBENAS.

TRANSPLANTED VERBENAS, free from all d's ease, will make salable plants in three weeks. Cuttings can be taken from them now.

These Verbenas are selected from 75 Standard and New varieties, and will be offered in transplanted plants

Until May 1st only.

ASSORTED COLOURS, \$1.50 per 100, \$12.00 per 1,000, \$50.00 per 5,000.

NAMED VARIETIES, in 24-inch pots, \$3.00 per 100, \$25.00 per 1,000.

G. RIBSAM & SONS,

TRENTON, N. J.

## HIGLEY'S TRADE LIST OF

SEEDS, PLANTS, BULBS

AND FLORISTS' REQUISITES

Now out. If you do not receive one, send for it. Address

HENRY G. HIGLEY,

CEADAR RAPIDS, IA.

# NEW TEA ROSE,

## "THE GEM."

It is a Rose larger in size than the Perle des Jardins, fragrant, of good habit, a vigorous grower, and a very fine bloomer. The color is creamy white, shading richer towards the center; the outer petals are occasionally fringed with pink.

We have tested "THE GEM" thoroughly the past two winters, and have no hesitation in recommending it as a Rose that florists can grow with satisfaction and **PROFIT**.

Good judges who have seen this Rose growing pronounce it First-Class.

At the price we offer it florists can afford to plant it largely.

**READ WHAT IS SAID ABOUT "THE GEM" BY MEN WHO HAVE SEEN IT:**

*Dear Sir:*—After having seen "The Gem" growing, I would say it is a Rose in size about like the Mermet or Bride, and being a strong grower and free bloomer, that it will prove quite an addition as a florist's rose.  
Yours truly, PHILADELPHIA, March 17, 1888.  
JOHN WESCOTT, of PENNOCK BROS.

*Dear Sir:*—We are pleased with "The Gem," and shall plant at least five hundred for our own use.  
Yours truly, PHILADELPHIA, March 17, 1888.  
CRAIG & BRO.

Strong, healthy plants in 2-inch pots, will be ready June 1, 1888, at \$25.00 per 100. Send for full descriptive circular.

**C. RAMSDEN, Agent,**

MORTON, PA.

### WESTERN FLORISTS

And any others who want  
*Cheap, Strong and Healthy Plants,*

ROBT. BROWN & SON'S SPRING TRADE LIST.

All leading plants at low prices in large or small quantities.

GERANIUMS and COLEUS, new and old.

ALTERNANTHERAS by the thousand.

ECHVEVERIAS by the hundred or thousand.

BEGONIAS in twenty leading kinds.

— ALSO MANY NOVELTIES. —

Stock all in good, clean, healthy condition.

ADDRESS

ROBT. S. BROWN & SON,  
Box 99, KANSAS CITY, MO.

### WESTERN FLORISTS

If you need any plants not quoted in this list, write to me; I have a large stock of most everything in the plant line.

I OFFER NOW	Per 100
5,000 Asa Gray Geraniums.....	\$ 3.00
5,000 Grant Geraniums.....	3.00
30,000 Geraniums, 20 varieties.....	3.50
5,000 Rose Geraniums.....	3.00
5,000 Carnations, Hime's White.....	3.00
Chrysanthemums, 30 varieties.....	2.50
Verbenas. Free of disease; named var.....	2.50
Coleus, 50 varieties.....	3.00
Ageratum, White Cap.....	3.00
Smilax.....	3.00
Double Petunias.....	2.50

SEND FOR TRADE LIST.

Address **N. S. GRIFFITH,**

JACKSON CO. INDEPENDENCE, MO.  
(Independence is well located for shipping, being 8 miles east of Kansas City.)  
Mention American Florist.

### ROSES AND PLANTS.

Before you order what you need, write for my Trade List. I have a large stock of TEAS, H. P. and NOISSES. If you have anything to exchange, name goods, and I will reply if favorable.

**E. HIPPARD, YOUNGSTOWN, O.**

The best Ventilator Apparatus, \$12.00.  
Best Steam Call Bell, \$5.00 to \$10.00.



## Hardy Herbaceous Plants



1870-1888.

For nearly twenty years we have been engaged in the cultivation and dissemination of

## HARDY PLANTS AND BULBS.

And our business is now the largest in the country for this class of plants. The only firm in the United States who makes a specialty of these plants alone.

One of the finest Collections of named Japan and German Irises to be found either here or abroad.

Our Catalogue contains a full selection of the best only.

Anemones, Aquilegias, Clematis, Hollyhocks,  
Christmas Roses, Funkias, Tritomas, Campanulas,  
Trilliums, Pæonies, Narcissus, Phloxes, Lilies,  
Veronicas, Orchids, Ferns, and Ornamental Grasses.

Price to the Trade on application.

**WOOLSON & CO.,**

LOCK DRAWER E.

PASSAIC, N. J





We wish to call the attention of florists to our stock of young

### \* ROSES \*

— AND —

### \* CARNATIONS \*

We also offer a large stock of acclimated

### RHODODENDRONS

grown one year in this country and well set with bloom-buds. These plants are in perfect health and condition and will prove satisfactory.

We also have a large stock of Musa Ensete and other desirable plants. Send us a list of your needs and will give you low prices.

**B. A. ELLIOTT CO.,**  
PITTSBURG, PA.

### We offer a Few Hundred of CLEMATIS \* FLAMULA,

Strong plants, two years, at \$10.00, Cash.

**J. H. CAMPBELL & SONS,**  
3601 Germantown Ave., PHILADELPHIA, PA.  
Mention American Florist.



**A. BLANC,**

ENGRAVER FOR FLORISTS,  
PHILADELPHIA.

Electro of this  
Cut, \$1.50.

Catalogue of  
electros of plant,  
flowers, designs,  
etc., with "S" and  
"SS" supplements,  
35 cts., with vegetable,  
30 cents,  
which deduct  
from first order.

### CARNATIONS.

ROOTED CUTTINGS

**HINZE'S WHITE AND DE GRAW**  
\$1.00 per hundred.

Special rates per 1,000 for April on above and other varieties. Fine transplanted plants low.

Rooted Cuttings of J. Goode Coleus, Verbenas, etc., at prices which it will pay you to get before placing your orders.

**PANSIES.** Wintered plants from cold frames, superb strains, fine plants \$1.75 per 100, \$15.00 per 1,000.

Sweet strains of flower seeds, also seedling plants for the trade. Send for list.

**ALBERT M. HERR,**  
LOCK BOX 338. LANCASTER, PA.

### CARNATIONS.

ROOTED CUTTINGS NOW READY.

**HINZE'S WHITE, HENDERSON, PRES.**  
**DE GRAW, PRES. GARFIELD, LA PURITE**  
\$1.25 per hundred; \$10.00 per thousand.

**C. B. HUMPHREY,**  
Walesville, Oneida Co., N. Y.

## \* NEW WHITE CARNATIONS \*

**WM. SIWAYNE AND L. L. LAMBORN.**

The two best white carnations ever offered. **EARLY, FREE AND CONTINUOUS BLOOMERS.** Stock of these excellent sorts will be ready March 1st, 1888. Orders received now, and filled strictly in rotation as received, Price, \$25.00 per 100.

Send for Cut and Descriptive List.

Wholesale price list of rooted cuttings of other leading sorts ready Jan. 1st.

**WILLIAM SIWAYNE, Kennett Square, Pa.**

**ROSES FOR FORCING.** GROWN FROM THOROUGHLY RIPPENED FIELD-GROWN PLANTS  
**LA FRANCE, MAD. DE WATTEVILLE, SUNSET, PAPA CONTIER, BRIDE, BON SILENE, MAGNA CHARTA, GEN. JACQUEMINOT, AND OTHER POPULAR VARIETIES**  
IN LARGE SUPPLY. **SEND YOUR LISTS AND HAVE THEM PRICED.**

SPECIAL QUOTATIONS IN LARGE LOTS.

Address

**THE DINGEE & CONARD CO.,**

ROSE GROWERS, WEST GROVE, PA.

### NEW CARNATIONS

**AM. FLORIST AND WM. SIWAYNE.**

"Am. Florist" is a beautiful rosy orange, variegated with carmine; large florets always on long stems, after the style of Grace Wilder; low growing plant and continuous flowering, about bursting.  
"Wm. Siwayne," this is the finest commercial winter-flowering white carnation on the market. The petals are of great substance and durability, making it one of the very best blooms to ship long distances; is very large and of the purest white.  
Strong plants of both varieties from 2 1/2 in. pots, 1 \$1.00 per doz.; \$5.00 per 100. They will be sent by mail at \$3.25 per doz., or one plant of each for 75 cts.

**CHAS. T. STARR, Avondale, Chester Co., Pa.**

### THIS INTERESTS YOU.

"STARLIGHT."

The new light yellow CARNATION; clear of stripes or markings; of vigorous growth, early and continuous bloomer; seventy-five per cent. of flowers on long stems, and never buds its calyx. Try it. Send for price list of Starlight, Wm. Siwayne, L. L. Lamborn, Silver Spray and other new and Standard varieties to

**GEO. HANCOCK, Grand Haven, Mich.**

### Carnations and Rooted Cuttings

OUT OF SAND BED.

Buttercup and Sunrise.....	\$3.50
Grace Wilder, Grace Fardon and Spruce.....	2.50
Chester Pride, Lady Emma, Edwardsii, Peter Henderson, Philadelphia Red, La Purite, Scarlet King, Black Knight, at.....	2.00
Spowdon and Crimson King.....	1.50
Century and Seaweed.....	2.00
In 2 1/2 inch pots, \$1.00 per 100 extra.	

**ISAAC LARKIN, Toughkenamon, Pa.**

### CARNATION

**HINZE'S WHITE.**

25,000 from sand bed, in first-class condition by April 1. \$10.00 per thousand.

Emperor of Morocco, same color as Jacq. rose, and Louise Schiller, the best pink for long stems, \$2.00 per hundred. Ask for sample flowers.

**SCHILLER & MAILANDER,**  
NILES CENTRE, COOK CO., ILL.

### SMILAX FOR EASTER

IN QUANTITY FOR THE TRADE.

**STORM KING FUCHSIA.** Well rooted Cuttings, \$3.00 per 100, as good as pot plants.

**FUCHSIA PHENOMENAL**—\$6.00 per 100, or will exchange for Chrysanthemums and Geraniums of some varieties, and Chb. Abut. Thomps.

**F. E. FASSETT & BRO.,**  
Ashtabula, O.

### PANSIES AND COLEUS

BY THE THOUSAND.

PANSIES, from 2 1/2 inch pots.....	\$ 2.00	\$15.00
Unimpaired.....	1.50	10.00
COLEUS, including Verschaffeltii and Golden Bicolor.....	2.00	15.00
BEGONIA METALICA, good plants 4 inch.....	1.00	30.00

**J. W. DUDLEY & SON, Parkersburg, W. Va.**

### MARIA LOUISE VIOLET.

Young, healthy, well rooted plants of Maria Louise Violet, all finest stock from crown divisions, now ready for shipment. \$2.00 per hundred. Address

**H. E. CHITTY,**  
Paterson, New Jersey.

### DOUBLE WHITE PETUNIA,

**MRS. G. DAWSON COLEMAN.**

Endorsed by such florists as Dreer, Henderson and Halliday, as the finest double white ever produced. Exquisite in shape, pure white in color. For floral work and bedding it has no equal. Mail, five for 75c; eight for \$1.00.

### NEW COLEUS FOR 1888.

Harry Harold and the Mikado..... } 30 cents each.  
Tokio and Yellow Jacket..... }  
Noneuch and Purple Prince..... }  
John Goode, the Chicago Beddler, 50c.; each 10c.  
The set of seven for 60c., two of a kind \$1.00 by mail.

**THOS. G. HAROLD,**

KINGSTON, Somerset Co., MARYLAND

### CARNATIONS.

ROOTED CUTTINGS will be furnished to the trade as usual in season.

FLORISTS' stall times in quantity.

Send for price list.

**JOSEPH RENARD,**

Successor to THOS. F. SEAL,  
UNIONVILLE, Chester Co., PA.

### CARNATIONS.

ROOTED CUTTINGS OF

Edwardsii, Scarlet Gem, Philadelphia Red, Crimson King, Snowdon, etc. \$1.25 per 100; \$10.00 per 1,000.  
Portland, Duke of Orange, Chester Pride, etc. \$1.50 per 100; \$12.50 per 1,000.

PLANTS ready March 15th at double the above rates. Pips if desired at one-half these rates. Many other new and desirable sorts. Send for price list and descriptions. Niagara Grape Vines \$15 per 100. W. R. SHELMIER, Avondale, Chester Co., Pa.

TO THE TRADE ONLY.

My New Special Offer of

### EXTRA CHOICE FLOWER SEEDS

Is published now, and may be had on application.

**FRED ROEMER, SEED GROWER,**  
QUEDLINBURG, GERMANY.

## PANSIES.

Wintered plants from July, four to five inches in diameter in fine condition, flowers unsurpassed in size and shaded colors.

Hundred, \$2.20; thousand, \$20.00. Separate colors, per hundred, \$2.60; per thousand, \$22.00. Plants from September of above kinds, per hundred, 70c. and 80c.; per thousand, \$6 and \$7, by

**CHAS. ZEPNICK,**

1329 KINEKINIE AVE.,

MILWAUKEE, WIS.

## 10,000 VIOLETS.

**MARIE LOUISE AND SWANLEY WHITE.**

Large clumps from cold frame, \$10.00 per 100.

**J. L. LOOSE, Alexandria, Va.**





Indianapolis.

At the next meeting of the club, papers will be read by John Martje and W. S. Gordou.

The last of the three assembly balls was held at the Dennison hotel Feb. 14. Wiegand had charge of the decorations which were excellent.

The son of the president of our local society died Feb. 20. The society sent a beautiful tribute in the shape of a chair, tied with a large bow of ribbon and inscribed "Vacant."

D. W. Cox of Crawfordville, has been appointed florist for the Vandalia railroad. Mr. Hoffman, florist for the Pan Handle, received notice several weeks ago to sell out all stock, the greenhouses and that his services would be dispensed with. This is not easy to understand, the Pan Handle people having done much in decorating their grounds in former seasons.

Trade has been moderate since Lent opened, while just before it was rushing. Several local florists did not attend the convention, explaining that all such conventions and meetings are "frauds." The State Board of Agriculture increased premiums at the State fair 10 per cent. and will appoint an expert judge and competent superintendent; so much for the society's existence. W. B.

### THE CELEBRATED WILKS' WATER HEATER!

For Heating

GREENHOUSES,

DWELLINGS,

POULTRY HOUSES,

STORES, BATH TUBS,

ETC., ETC.

Send for Price List.

S. Wilks Mfg. Co.,

Cor. Monroe & Clinton Sts., Chicago  
Mention American Florist.

## SLATE AND IRON BENCHES FOR GREENHOUSES.

Write for Circular.

CHAS. S. PRICE,  
LANSLOWNE, PA.JOHN N. MAY, Summit, N. J.  
SIEBECHEIT & WADLEY, New York.  
CRAIG & BRO., Philadelphia, Pa.  
HILL & CO., Richmond, Ind.  
J. C. VAUGHAN, Chicago.  
Mention American Florist.

Delegates to the next  
convention will travel  
via the  
**MONON ROUTE**  
TO AND FROM  
Louisville, Indianapolis, Cin-  
cinnati and the winter re-  
sorts of Florida and the  
South. For full information  
address  
E. O. McCormick, Gen. Passenger Ag't, Chicago.



### FOR THE TRADE. FLORAL WIRE DESIGNS.

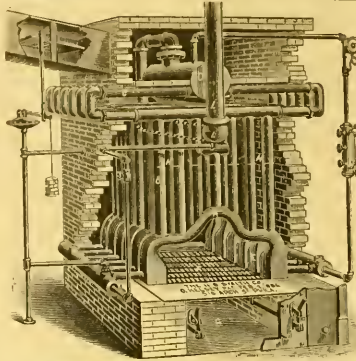
JAS. GRIFFITH,

THE PIONEER MANUFACTURER IN THE WEST.

305 Main Street.

CINCINNATI, OHIO.

SEND FOR WHOLESALE PRICE LIST.



ESTABLISHED 1853.

— THE —

### O. K. STEAM GENERATOR

Is especially adapted to warming

GREENHOUSES, GRAPERIES

AND CONSERVATORIES.

Special features insure

Economy, Simplicity, Durability,

Giving best results with least labor and fuel.

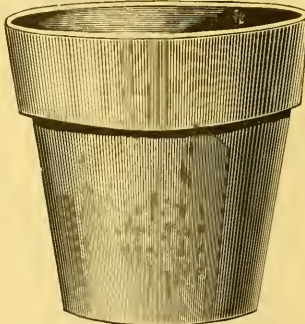
Send for DESCRIPTION.

THE H. B. SMITH CO.,

510 Arch Street,

PHILADELPHIA, PA.

Mention American Florist.



### THE WHILLDIN POTTERY COMPANY,

713 and 715 Wharton St.,

PHILADELPHIA, PA.

— USE —

### The Improved Rim Pot,

AND SAVE ONE-HALF THE BREAKAGE.

Send for Illustrated Price List.

Samples, with sizes marked sent on application.

### SYRACUSE POTTERY.

Thumbs.....\$2.54 Special 3-in. 4.61 4 1/2-in.....7.91  
2 1/2-in.....3.05 3-in.....4.75 4 1/2-in.....10.83  
2 1/2-in.....3.57 3 1/2-in.....5.25 5-in.....13.75  
Above prices per 1,000, delivered free on cars.  
We ship all over the U. S. Free samples with first  
order. Order a trial crate. If you send check add  
the exchange. Send for frt. rates and list of prices  
at which we pack to order assorted sizes in a crate,  
and for list of 17 ready packed crates. Notice that  
we sell at the above prices only in

#### READY PACKED CRATES

shipped at buyer's risk and freight; cash with order.

PRICES BY THE CRATE: 3 1/2 Thumbs, \$8.00;  
2 1/2 2 1/2-in, \$ 8.00; 3 1/2 4-in, \$ 4.75;  
1 1/2 2 1/2-in, \$ 2.25; 3 1/2 4 1/2-in, \$ 3.00;  
1 1/2 3 1/2-in, \$ 6.00; 3 1/2 5-in, \$ 4.40;  
1 1/2 5-in, \$ 5.50; 1 1/2 6-in, \$ 3.50;  
3 1/2 5 1/2-in, \$ 5.50; 1 1/2 No. 3 Ross, \$ 7.00;

J. N. PERKINS, Manager, Syracuse, N. Y.

#### HAND TURNED POTS

From HILFINGER BROS.' POTTERY,  
FORT EDWARD, N. Y.

PRICES PER HUNDRED:

2-in. 40c, 2 1/2-in. 50c, 3 1/2-in. 55c, 4-in. 55c, 5-in. 1.15,  
6-in. 1.25, 7-in. 1.40, 8-in. 1.50, 9-in. 1.60, 10-in. 1.75,  
12-in. \$2.50, 14-in. \$3.00. Cylinders for Cut Flowers,  
10x11 1/2, 11x13 1/2 per doz. We pack in cases which  
are very strong. No charge for packing. Our pots  
are well burnt and strong. TERMS CASH. Address

HILFINGER BROS., Fort Edward, N. Y.

### HALES' MOLE TRAP

For destroying ground moles in lawns, parks,  
gardens and cemeteries. The only PERFECT  
mole trap in existence. Guaranteed to catch  
moles where all other traps fail. Sold by  
woodmen, Agricultural Implement and Hardware  
dealers, or sent by express on receipt of \$2.00 by  
H. W. HALES, RIDGEWOOD N. J.

### D. C. SCHOFIELD, — MANUFACTURER OF —

### Improved Greenhouse

### \* FLOWER POTS \*

NEW BRIGHTON, PA.,

Offers to the Trade the BEST

Quality of Improved Shoulder Pot

in the market at the

LOWEST PRICES EVER OFFERED.

SEND FOR PRICE LIST.

Orders will receive prompt and careful atten-  
tion and satisfaction is warranted in every respect.

### SASH BARS

VENTILATORS, RIDGES, GUTTERING  
AND LUMBER.NO WIDE-AWAKE FLORIST need be told  
it will pay him to use Sash Bars, etc. made from

CLEAR CYPRESS.

Bars all Shapes up to 20 feet long.

Send for circulars and estimates.

LOCKLAND LUMBER CO.,

LOCKLAND, HAMILTON CO., OHIO.







# THE AMERICAN FLORIST



*America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."*

Vol. III.

CHICAGO AND NEW YORK, APRIL 15, 1888.

No. 65.

## THE AMERICAN FLORIST

Copyright, 1887, by American Florist Company.  
Entered as Second-class Mail matter.  
Published on the 1st and 15th of each month by  
**THE AMERICAN FLORIST COMPANY.**  
GENERAL OFFICES, 54 La Salle Street, Chicago.  
EASTERN OFFICE,  
Room 81, Vanderbilt Building, New York.

All communications should be addressed to the  
general office at Chicago.

SOCIETY OF AMERICAN FLORISTS.—R. G. Hill,  
Richmond, Ind., president; John N. May, Sum-  
mit, N. J., vice-president; M. A. Hunt, Terre  
Haute, Ind., treasurer; Wm. J. Stewart, 67 Brom-  
field street, Boston, Mass., secretary. The fourth  
annual meeting at New York, August 14, 15, 16,  
1888.

**EASTER PLANTS**—We have in hand a  
very valuable article on "Easter Plants,"  
by Robert Craig, which we expected to  
print in this issue, but which we are un-  
able to do on account of delay on the  
part of engraver in preparing the illus-  
trations which will accompany it. It will  
appear in next issue.

**TWENTY-EIGHT PAGES** this issue, four  
pages more than any previous issue, and  
twelve pages more than we originally  
expected to publish in each number.  
The price is still \$1 a year. The total  
issue of this number is 7000 copies; 2000  
extra copies being sent to non-subscrib-  
ers, whom we hope to add to our list. If  
you are not already a subscriber send  
your name and \$1, and receive this paper  
twice a month for one year.

**THE EASTER TRADE.**—All reports in-  
dicate that there has been a marvelous  
growth in the Easter trade all over the  
country. Loose cut flowers were almost  
everywhere preferred to designs, and of  
those used the majority were memorial  
designs sent to churches by individuals.  
There has been a remarkable increase in  
the demand for blooming and decorative  
plants at this time, which bids fair to  
further increase in the future, and wise  
florists will prepare to supply it. An-  
other pleasant feature is the increase in  
the demand for boxes of flowers to be  
used as Easter presents.

Grace Church, New York, Altar Deco-  
ration—Easter.

This was among the most chaste ar-  
rangements in this city. In the back-  
ground in the center of the altar was  
a large cross of solid lilies, with a wreath  
of superb red roses over its arms. Great  
clusters of *L. Harrisii* spread out at the  
sides of this cross. The sides of the altar  
were filled with genista bushes of im-  
mense size. There were lilies and white  
hydrangeas in groups to form a crescent.  
See engraving, page 393.



Reports from all Sections.

**HAMILTON, ONT.**—The big-  
gest Easter business here this  
year we ever had.

**NEW HAVEN, CONN.**—Easter trade bet-  
ter than usual, chiefly in roses, tulips,  
carnations and Easter lilies. Church  
decorations about the same as last year.

**ST. LOUIS.**—Easter trade was a little  
larger than last year. Two-thirds of the  
orders were for loose cut flowers. The  
churches were neatly decorated, though  
nothing elaborate. There was a large  
call for longiflorum lilies.

**HARRISBURG, PA.**—Easter trade was  
50 per cent. larger than last year. Loose  
flowers were mostly called for, and there  
was an increased demand for pot plants  
for decorations. The churches also deco-  
rated more than usual.

**DETROIT.**—The total volume of the  
Easter trade was about 25 per cent. larger  
than that of last year. The calls for  
loose flowers, pot plants and decorations  
were about equal. The churches were  
more profusely decorated than ever before.

**MILWAUKEE.**—Easter trade was a trifle  
larger than usual, the calls being in  
about the following proportions: Loose  
flowers 40 per cent., designs 30 per cent.,  
pot plants and decorations 30 per cent.  
The churches decorated rather less than  
last year.

**CLEVELAND.**—Trade very much larger  
than last year, fully nine-tenths of the  
calls being for loose cut flowers and pot  
plants. The churches were liberally deco-  
rated; each member contributed loose  
flowers or plants, which were arranged  
by the church people themselves.

**ROCHESTER, N. Y.**—Trade a trifle  
smaller, owing to inclement weather  
previous to Saturday. The call was  
chiefly for cut flowers. Pot plants sold  
well. Churches decorated liberally with  
plants. Not many designs used. Easter  
Sunday closed with a severe snow-storm  
at 5 P. M., followed by a sharp thunder-  
storm in the evening.

**RICHMOND, VA.**—Trade much larger  
in plants and flowers, with the calls  
about equally divided. Fine hybrid roses  
in 6 and 7-inch pots, in bloom, sold  
quickly, in addition to the usual run of  
Easter plants. In cut flowers, fine roses  
and lily of the valley were in best de-

mand, violets and carnations coming  
next. No designs to speak of, and slim  
decorations at churches.

**CINCINNATI.**—There was an excellent  
Easter trade; all the florists sold out.  
The churches decorated about as much  
as usual, the Protestants more than the  
Catholics, the latter having not yet re-  
covered from the heavy failure of their  
bishop some time ago. Loose flowers  
were most in demand. There was a large  
Jewish funeral Easter Sunday that took  
over seventy pieces of work; in addi-  
tion to the usual Easter demand made  
things lively for the florists.

**DES MOINES, IA.**—Easter trade was  
rather quiet. The calls for cut flowers  
were about the same as last year, while  
plants in bloom sold better. Designs  
were few in number and small in size.  
Loose flowers were used principally for  
Easter presents and the plants for church  
decorations. Anything in flower was  
salable. Churches do not pay much for  
decorations; plants loaned by members  
chiefly. Bulbs were all out of bloom and  
bad weather kept back most of the lily  
stock.

**SALT LAKE CITY.**—Easter trade was  
about the same as last year, and designs,  
cut flowers and pot plants were called for  
in about the same proportions. There  
was an increased demand for calla lilies,  
owing to the fact that a hard winter in  
California made importations of flowers  
from that state scarce. The inability to  
secure flowers from California has made  
increased sales for local florists all win-  
ter, calla blooms selling readily at 50  
cents each. The churches decorated  
about the same as last year.

**PITTSBURGH.**—The Easter trade was  
fully 25 per cent. larger than last year,  
loose flowers and decorative plants com-  
posing the bulk of the sales. In cut  
flowers lilies and roses took the lead.  
The churches decorated more than usual,  
using principally plants, with large quan-  
tities of loose flowers tastefully arranged  
in vases. Designs were but little used  
and seem to be generally falling into dis-  
use except for funeral work. Flowers  
were better in quality and somewhat  
lower priced than last year.

**SPRINGFIELD, MASS.**—Trade much  
larger than last year, one florist report-  
ing his sales as at least double those of  
'87. Loose flowers were in brisk de-  
mand. Good potted plants such as lilies,  
hydrangeas, azaleas, etc., sold well, while  
made-up designs were little called for,  
except the "Easter cross," which nearly  
all the churches wanted. Potted plants  
in bloom were called for more than palms  
for church decorating. Trade was largely  
in roses and bulb flowers, many more  
lilies being sold than usual.

**TORONTO, ONT.**—The Easter trade in  
cut flowers was decidedly an increase



upon last season, especially for loose flowers. Church decorations were an improvement upon last year and prices ruled better, buyers appreciating the value of cut bloom especially. Our florists seem to grasp the idea that it is necessary to work up a stock for Easter trade and risk it, which has proved to those so prepared that "it's a good idea" and pays. Take it on the whole, trade was about half as good again as last season.

MINNEAPOLIS.—Easter trade here was the best ever known. All the florists sold out their stocks and all demands seemed to be supplied. The few weeks of sunshine previous to Easter brought out the roses in fine style. The florists here agreed on a sale of prices for Easter and as far as can be ascertained strictly lived up to the scale. The new local society has established a much better feeling among the trade here than heretofore, as is evidenced by a willingness to accommodate each other unknown before.

LOUISVILLE, KY.—Easter trade was 50 per cent. larger than last year. Florists had all the business they could possibly handle. The calls for loose flowers were largely increased, and they were freely used in decorating houses and churches. The calls for lilies of all kinds were even larger proportionately than usual, also for roses. There was not near enough flowers to supply the immense demand. The churches were all profusely and handsomely decorated; palms, blooming azaleas and other blooming pot plants being largely used.

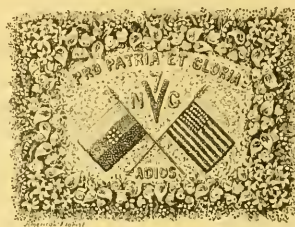
INDIANAPOLIS.—Trade in cut flowers was good; larger than former years. Decorations for churches were not numerous, and with few exceptions, cheap. Pot plants sold well and at good prices; lilies were very scarce. Very few designs were used. There was a big demand for loose flowers and bouquets, it being a beautiful day. Lilies were in demand, cut roses, as usual, took the lead; next came narcissus, tulips, etc. A new departure in the way of decorating churches was that members were requested to purchase plants and flowers and bring them to the church to be placed in position. Hyacinths were plentiful in the market. A good spring trade is expected.

BUFFALO.—Easter trade here was good; all are well satisfied and report an increase of 50 per cent. over last season. The greatest call was for roses, violets, lily of the valley and other loose flowers. There was a great demand for nice plants in pots; many more *Harrisii* and *spirea* could have been sold. There was a noticeable falling off in the demand for tulips and narcissus, and although they have sold fairly well all winter, the craze for them is evidently on the wane. Church decorations were quite as elaborate as usual, several smaller churches decorating for the first time. There were scarcely any designs used, the decorations being entirely made with palms, lilies and other flowering plants.

WASHINGTON.—The early date of Easter and the exceptional backwardness of the season precluded people from availing themselves of wild flowers for decoration this year, in addition to which some of the more enterprising florists have been advertising more freely than usual, and in display have shown most creditable business tact. The result has been a most excellent Easter trade—really phenomenal, I may say. I visited

the markets and leading florists last night and this morning; literally everything that was at all suitable for Easter was sold. In the matter of potted Easter lilies alone one dealer (Small & Sons) sold not less than a thousand plants, and another (Studer) every plant he had in bloom—some six hundred—and more could have been disposed of at good prices could they have been had; consequently there is joy among all in the trade here to-day.

CHICAGO.—All florists report that the Easter trade was much larger than last year. Considering all reports, the average increase was about 30 per cent. The increase was almost entirely in calls for loose flowers and blooming pot plants. The churches were all liberally decorated, but it was done by individual contributions rather than by the churches as organizations. Nearly all the designs used were ordered by individuals and sent to



MEMORIAL DESIGN FOR GENERAL PAEZ  
(SEE PAGE 394.)

the churches as memorial designs. There was a large sale of flowers in boxes to be used as Easter presents, and at the churches Easter morning the wearing of flowers by the ladies was universal. The supply of flowers was also better than usual at this season, some late arrivals of roses proving a surplus, though the supply of good lilies was short as usual. With a good supply of stock, pleasant weather and a lively demand, florists did a rushing business and are well pleased with the Easter sales of 1888.

ST. PAUL.—The Easter trade was considerably larger than that of any previous year. Loose flowers were the leading call and the demand was greater than the supply. Designs were principally confined to crosses for the churches. The demand for pot plants was greater, especially for Easter lilies, callas and small plants; hyacinths were all sold out. In regard to church flowers, I find the demand is more strictly for lilies, tulips and showy flowers; they seem to be hard on roses, and I did not send a single rose to any church. There seems to be a growing prejudice against the rose; they say "they wither so quick, droop," etc. Tulips, freesias, begonias, etc., are running roses out for decoration. Violets we can sell all we can get. The churches generally are increasing in their Easter and other decorations. It is no longer confined to Catholic and Episcopal, but our Baptist, Methodist and other denominations are competing with them.

ALBANY, N. Y.—The trade for Easter in this city was larger than ever before. Every florist succeeded in disposing of his entire stock, and in some cases considerably more flowers might have been sold could they have been obtained in

season. Pot plants and loose flowers were in about equal demand, the greater number of plants, of course, going to the churches. Still, many were sold to private houses, most people believing that Easter demands some recognition in the shape of flowering plants in the windows. This is gratifying to every florist, and demands foresight in preparing for the demand which is certain to exist at every recurring season. The churches seem anxious to surpass one another in the extent and artistic quality of their decorations. Each year finds them demanding something fresh, which taxes the originality of the florist to the utmost. Lilies, of course, predominate. Tournesol tulips, narcissus and hyacinths were also extensively asked for. Good azaleas always meet with a ready sale. Lilacs, as at present forced, are not very much cared for. Their weak and colorless appearance detracts much from their merits. The Easter trade has come to stay, and it is a wise man that is ready to take advantage of the opportunity. Roses by the dozen, boxes of assorted cut flowers, bunches of violets, carnations, etc., embraced principally the trade in cut flowers.

BALTIMORE.—Easter left behind it pleasant souvenirs for our florists in the shape of good United States currency and reduced stock. Trade in plants and cut flowers has been far ahead of preceding years. The weather, which for some time past had been extremely cold and disagreeable, put on its spring attire two days before Easter and has worn it ever since. The pleasant change brought everybody outdoors, and during Friday and Saturday the florist stores were completely overrun with customers, one or two florists being compelled to close their doors early Saturday evening, having engaged or sold their entire stock. Flowering plants for Easter gifts and decorative work were in very brisk demand, but this by no means reduced the sales of cut flowers. There was a very decided falling off in the matter of bouquets, baskets and designs for church decoration, but everything that could be used for loose flowers found a ready sale. In the matter of plants the supply was quite equal to the demand, but the demand for cut flowers on Saturday evening could not be met. Concerning all designs, whether for private or church use, there was a prevailing whim to have them composed entirely of "the flowers that bloom in the spring," and very handsome some of them were. One cross in particular which I saw at Feast's, and intended for St. Paul's (P. E.) church, took my fancy; it was composed mainly of white tulips, hyacinths and astilbe; at the top and extremity of the arms there was a wide band of daffodils, while across the center there ran a broad belt of calceolarias; the effect was peculiar, but very pleasing. The decorations in the different churches were unusually fine, but consisting, as already stated, chiefly of flowering plants. Some elaborate work was done in decoration of memorial windows at some of the churches, but excellence of design and arrangement was so general in all cases that it would be difficult to discriminate. At St. Paul's P. E. church, however, the decorations were much more extensive and elaborate than in any of the other churches; it was probably the most handsomely decorated church in the city. The work was done by Feast, and I was assured that more plants were used in this church last Sunday than for three previous years put together. I may not

be amiss to give a rough outline of prices obtained for plants and flowers. Halliday had some handsome flats filled with hyacinths, tulips, etc., which brought from \$2 to \$5, according to size. Harrisii brought 75¢ @ \$1.50; Deutzias, spiraeas, callas, 50¢ @ \$1; good azaleas brought \$2 @ \$3; palms, etc., were sold at from \$2 @ \$5. In cut flowers the average was about as follows: Am. Beauty, 50¢ @ 75¢ each; La France and Jacqs, \$3.50 @ \$5 per doz.; Perles, \$1.50 @ \$2; Bennetts, \$2.50; Mermets and Niels, \$2 @ \$3; callas, 25¢ each; hyacinths, \$2 per doz.; tulips and lily of the valley, \$1; violets, 60¢ per 100.

#### Boston.

Easter trade here seems to have given general satisfaction. The quantities of flowers disposed of were enormous and far exceeded anything done in previous years. The weather was such as to bring out every customer, and there were flowers enough for all. No scarcity to report in any standard varieties except smilax and candidums. Prices advanced but little on a few things, and on many kinds there was no advance whatever. The trade in loose cut flowers showed the largest increase. There was also an increased demand for flowering plants such as lilies, spiraeas, cinerarias, hydrangeas.

The various churches decorated about as usual. There was no very extensive displays, and but few designs other than crosses were used.

The weather was favorable for the shipping trade, being neither cold nor hot, and the quantity of flowers sent from this market to various parts of the country was larger than ever before, but at somewhat lower prices than in previous years. W. J. S.

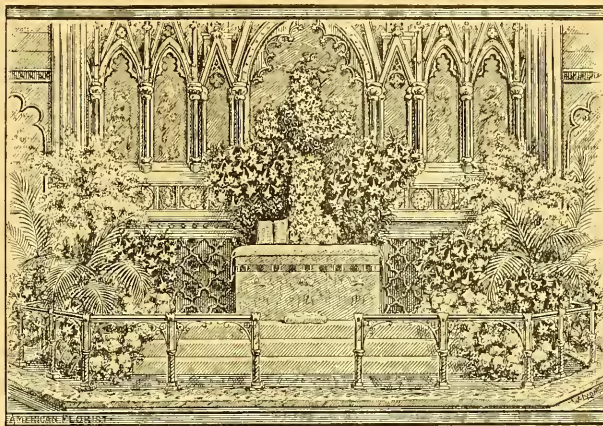
#### Philadelphia.

There was general dissatisfaction expressed amongst the florists about the Easter business, because there was too much of it. On paying many of them a visit on Easter eve, they presented anything but a cheerful appearance. They were tired. Flowers were plentiful and not high in price. There seemed to be no scarcity of anything.

The demand for plants was greater than ever before. Presumably because they were more abundant and in fine shape. *Lilium longiflorum* and *Harrisii* were to be had in any quantity, and they were disposed of at good prices. All the leading florists getting readily 50 cents for each flower and bud. *Hydrangea otaksa*, both pink, and the doctored blue, sold well, as also did the white variety "Thomas Hogg." The large number of plants handled was the main cause of complaints amongst florists, because their delivery entailed more labor.

There were at least one-third more loose flowers sold than designs. Churches were decorated about the same as usual. The florist is too weary at this season to study out new styles of decorations. Florists claim there is little or no profit in church decorations at Easter. *Asparagus tenuissimus* was used more freely than usual, as it well deserved to be, for nothing is more graceful and lasting. *Smilax* was, and is still scarce, more so than has been known before for a number of years. Yet it was a drug here about Christmas. Both dealer and grower must wake up to the necessity of regulating the supply of staple articles like the one just referred to.

Taking the Easter trade for 1888, altogether, it will long be remembered as the busiest on record here.



EASTER ALTAR DECORATION, GRACE CHURCH, NEW YORK. [SEE FIRST PAGE]

#### New York.

Whatever the general state of the trade may be, one thing is sure—this was an Easter of plants rather than of cut flowers. Flowers were sold in great quantities, but there was a very marked increase in the sale of flowering plants and in their use as decorations. It is decidedly encouraging to the florists, too, to find that Easter church decorations are increasing in all denominations, instead of being confined to the Episcopal and Roman Catholic communions, as they were at one time.

There were plenty of poor azaleas in the market, but really good ones were scarce and brought excellent prices. *Hydrangeas* were very plentiful and extremely fine. A fair supply of nice *rhododendrons* and plenty of bulbs. Pot plants were sold largely; in fact, plants and assorted boxes of cut flowers really took the place of baskets or designs. Very few designs were sent out by any of the fashionable florists.

Taken as a whole, flowers brought smaller prices than previous years, but as previously stated, a very large quantity was sold. The expected avalanche of lilies from Bermuda did not appear; in point of fact, it is hardly likely that Bermuda lilies will seriously interfere with those grown here. So far they have not been so well grown as those raised here; a large proportion are quite short-stemmed, and we haven't much use for short-stemmed lilies. *Longiflorum*, *Harrisii* and callas ran about the same price—\$2 to \$2.50 a dozen—though the Saturday before Easter callas were unusually scarce.

*Freesia* was overwhelmingly plentiful—all other bulbs too, for that matter. *Lily of the valley* ranged \$3 to \$4 a hundred—very plentiful, but in demand; Roman hyacinths the same; tulips the same, and still plentiful. *Siebrecht & Wadley* had a lovely double tulip of real rose pink just in time for Easter, very fragrant and not generally grown. Good *smilax* was 25 to 35 cents a string; poor *smilax* could not be given away—people don't want it.

There are very fine roses in the market; our erstwhile disappointing friend the Puritan is improving very much, thus supporting the impression that it would do better in the spring. Some of the best hybrids in the market at Easter came from around Boston. There was not an over supply of *Baroness*, but they are now increasing in quantity and improving in quality. *Beauties* brought \$3 to \$4 a dozen; *Bon Silene*, \$3 a hundred—singularly enough, they were very scarce Easter day. *Perles* were \$5 a hundred; *Mermets*, \$8; *Brides*, \$10; *Jacqs*, \$10; *Baroness* and *Mabel Morrison*, \$3 to \$4 a dozen. *Morrison* are coming in more plentifully now. *Neyrons* averaged about the same as the foregoing. *Niphetos* were \$5 a hundred; *La France*, \$10 to \$12; *violets*, 50 cents a bunch.

The church decorations called for a lot of lilies, cut as well as in pots, but there were comparatively few cut flowers used in such work apart from these. *Hydrangeas* were undoubtedly the most plentiful. *Rhododendrons*, which were really good, will probably pay better to sell in the form of flowering plants than cut flowers, because the grower has to cut off such a lot of the wood to give a sufficiently long stem that the plant is decidedly crippled in appearance afterwards.

E. L. T.

There was never such an extensive trade done in plants and cut flowers as this year at Easter. The churches all decorated more or less, but more particularly with lilies. The sale of plants throughout the city was tremendous, lilies and *hydrangeas* taking the lead. Most of the cut flower offerings were boxes of these. There was only an occasional basket sent. Choice cut flowers were demanded in these boxes, and any novelties forced for the occasion were highly esteemed and brought good prices.

There were but very few designs made up in memoriam. Most of those ordered were composed of ivy, with a few lilies festooning, and were taken to graves the day following Easter. The demand for fine foliage was noticeable. *Mignonette*



has never had such a run as this season. There was but a slight advance in the prices of flowers Easter. Florists have opposed the running up of prices holidays so strenuously, and have used such good management beforehand, that this can never be carried to the extent it has been previously.

The flower stores were crowded to their utmost capacity the day before Easter Sunday, and florists state that they had not room for enough assistants to fill orders. Plants were cleaned out and replaced. Fine specimens brought a good equivalent in money. The demand for blooming plants exceeded that for cut flowers, yet in west side localities the latter sold in immense quantities. The call for azaleas was not as heavy as usual, although a great number of these plants were sold. French Marguerites were very well received. Plants of admirable cultivation were offered. There was a decided preference for *Lilium longiflorum* over *L. Harrisii*. The crop of *L. candidum* was short. F. A. B.

#### Mass. Hort. Society Spring Exhibition.

The annual spring flower show of this society was held March 23, 24 and 25. In a general way it may be pronounced a success, as the quality of the hyacinths, tulips and narcissi was far ahead of that of the corresponding exhibition last year. Another gratifying feature was the increase in number of rose exhibitors from the ranks of the commercial men and the high standard of excellence shown in their exhibits. With proper encouragement and efficient management, the possibilities in this department of the exhibition are almost illimitable, and the interest shown by the groups of spectators, who crowded around the magnificent specimens of Her Majesty, American Beauty, Bennett, and other noble representatives of the rose grower's art, ought to point out moral for the consideration of the magnates of this society, even if the steady decrease in attendance of paying visitors does not.

E. M. Wood & Co., of Natick, staged a number of well-grown plants in bloom, of the much-talked-of rose, Her Majesty. Other fine varieties shown by the same exhibitor were cut blooms of the Puritan, Bennett, Cornelia Cook and American Beauty. Peter Ball, of Malden, showed specimens of American Beauty, which certainly deserved a "front seat." Norton Bros., Thos. Meade, Fred Palmer and Jas. Brydon, all showed creditable rose exhibits. The groups of spring flowering bulbs were gorgeous in the extreme and well-merited the various premiums awarded. C. H. Hovey, Mr. Martin, A. H. Fewkes, W. A. Manda, and others, contributed with their usual liberality to this important department of the show.

Those who looked for the customary extensive display of orchids at this season of the year were, in a measure, disappointed, as two of the leading men in this specialty were conspicuous by their absence. One of the finest plants ever seen in the hall was a specimen of *Dendrobium nobile* in robust health, and bearing nine hundred expanded blooms. This was contributed by Norton Bros. A plant of *Dendrobium glumaceum* from W. A. Manda had upwards of forty spikes. C. M. Atkinson showed a fine specimen of *Cattleya intermedia* bearing about forty flowers. Among the rarer varieties shown were an extra good *Odontoglossum*

*Pescatorei* from H. H. Hunnewell, a *Cattleya trianae* of deep, dark color, from W. A. Manda, and fine varieties of *Dendrobium nobile* Wallichianum from E. W. Gilmore and E. Sheppard & Sons.

There were some pretty ericas from C. M. Atkinson, and the same gentleman showed two nice plants of *Eriostemon intermedia* and *E. depressa*. A good specimen of *Gloneria jasminiflora* from H. H. Hunnewell was also worthy of notice. The azaleas from J. W. Blake, of Brookline, although not large, were well-grown, clean and nicely flowered.

The general effect of the exhibition was greatly heightened by a number of large plants of *Cytisus Everestiana*, and elegans, the bright, golden yellow, lighting up the hall wonderfully. The customary large collection of plants came from the Botanic garden, and was artistically arranged in luxuriant terraces at one end of the hall. W. J. S.

#### Presentation of the Langtry Prize.

On Saturday, March 24, Mr. T. H. Spaulding, president of the New York Hort. society, gave a dinner to a few lovers of horticulture and some friends. Among those present were Mr. Eben Baldwin and Mr. Augustus Brown; among the horticulturists present were Messrs. Thorpe, Craig, Lonsdale, Elliott, Finn, May, Court, Fostermann and others. After ample justice was done to Mr. Spaulding's generous entertainment, the Langtry cup won by Mr. Finn at the November show in New York was presented to that gentleman, who, it is only fair to remark, is justly proud of the elegant and valuable trophy. There were several invitations sent out which could not for various reasons be accepted by the recipients, all of whom sent letters of regret, and some contained very valuable suggestions for the advancement of horticulture. The following is selected as a representative one:

CINCINNATI, O., March 9, 1888.

T. H. Spaulding, Esq., President New York Hort. Society.

MY DEAR SIR:—I HAVE YOUR note of the 16th inst. announcing the date fixed for the Langtry cup presentation dinner, and asking me to join you and our friends on this delightful occasion. I immeasurably regret my inability to absent myself from business requiring my attention in the west on the day you name, but assure you of my presence in spirit, though unable to materialize. I wish you all the jolliest time possible, good appetites and good digestion. I congratulate the recipient of Mrs. Langtry's graceful testimonial to his taste and art which he honorably and worthily won. I trust the cup may be emptied often and ever of his inspiration to zealous undertakings in horticulture, and a true appreciation of the gardener's art.

The divinest of all decorations, interior or exterior, in all ages and by all nations, has been done in living foliage and living flowers. Art in marble, in metal and on canvas caught its finest forms and fairest colors from this prolific source, but artists who have ever appropriated the fairest graces in forms from nature, cannot steal her fragrance, her freshness, her mending, ever-changing beauties which rest and elevate the soul of man. Commercial statistics demonstrate a startling decrease within the past two decades of time in the money outlay of the world in the direction of the so-called fine arts, while the governments and the peoples of civilization in both hemispheres are looking higher, worshipping finer goods, and growing in knowledge of more elevated tastes. In a word, these statistics point to the fact that we are to have more parks and gardens and winter palaces for plant lore, and fewer picture galleries, public and private. Truly this is a step upward and onward, another evidence that the human race is in pursuit of happiness, and at last the highest intelligence has pointed out Paradise, again a garden.

With highest regard for your personal devotion in the interest of the society in New York and the fullest faith in the growth of horticulture and the highest civilization exists, I remain

Sincerely your friend,

F. T. McFADDEN.

At the conclusion of the reading of the above letter the writer was toasted with three cheers and with many wishes that he might live long to encourage with his pen and voice the workers in the cause of horticulture.

Mr. Craig spoke in very forcible terms of the value of flower shows as a means of diffusing a love of nature's beauties, and of advancing the florists' calling. This was followed by many valuable suggestions from others present, of which lack of space forbids mention. Every one present was well pleased with the entertainment and went away convinced that such gatherings go far toward cementing good feeling and securing that united action so necessary to insure successful flower shows, as well as to promote a general good fellowship among men.

Mr. Spaulding has been for some years a liberal patron of horticulture. May others join hands with him and place the society of which he is president in the front rank, so that in the near future we may see some grand shows in New York and the art of horticulture in that city receive a fresh impetus thereby.

A GUEST.

#### Memorial Design for General Paetz.

The panel was five feet wide. On a ground of white cake flowers was lettering and flags made of colored immortelles. The American flag was worked out handsomely, as was the Venezuelan flag, which has nine stars in the blue field. The lettering was made of immortelles. The V was red and the 7 blue. This design was laid on the bier of Gen. Paetz by the veterans of the Seventh regiment while the remains of the hero laid in state at the city hall, New York. Fred. Gordon made the piece in his finished style. It was edged with a wide band of lilies, roses and adiantums.

#### New York Notes and Comments.

The first out-door bedding of the season was to be seen about Easter, vases and balcony boxes up-town being filled, usually with pansies or bulbs. Of course, they won't last very long, and they stand a fairly good chance of being frozen, but they are very attractive as long as they last, and the custom is to be highly commended—especially from the florist's standpoint.

There was more work done by the florists during the past Lent than ever before; few big entertainments, but the flowers were used in plenty of other ways. The season did not open with a rush immediately after Easter, though the usual spring crop of weddings has begun. We hear rumors of "spring openings," in the form of private shows by various florists, but they do not seem very certain as yet.

Mr. J. N. May is sending in some mammoth mignonette—tremendous spikes. It is effective in combination with hybrid roses; too large, almost, to mingle with smaller flowers. Very fragrant, yet different in perfume from the small red sort.

The Florist Club met on the 11th inst. to discuss Mr. Thorpe's Timely Hints, and, most probably, to compare notes on the blizzard. The losses caused by this storm are only just being realized, in many cases. Where there was heavy damage done to the houses, plants, which were apparently unhurt at first, now show the effects of the frost in checked buds and imperfect flowers. This is especially the case with hybrid roses. The

indirect loss by the storm is especially felt among those doing a large shipping trade, as of course business was at a complete stand-still for more than a week.

Mr. Murdoch's suggestion, relative to the S. A. F. badge, is certainly a very sensible one. The little rose-leaf is now so thoroughly identified with the society that it would be a pity to change it. It is spoiled by any more elaborate ornamentation than the initial letters, and if there must be anything further, let it be on a ribbon, by all means.

EMILY LOUISE TALPIN.

#### An Emperor's Crown.

*Contributed by Hanft Bros. to the Memorial services held at Stenway Hall, New York, for William I. of Germany.*

The crown was composed of daffodils, carnations and corn flowers. Around the base was a band of daffodils. The four arches, with bands meeting at the top, were of Crimson King carnations, the arches between being yellow (daffodils). This made a brilliant alternation of red and yellow. The crosses in arches were red carnations. The red bands meeting in the center were edged with corn flowers, and the inside cap part was also of corn flowers, which formed also a background for the crosses. The Maltese cross and half ball at top center were of daffodils. The crown rested on a pillow of ivy leaves, with a bunch of white roses at each corner. Behind the crown, fastened in the pillow, were six leaves of *Cycas revoluta*.

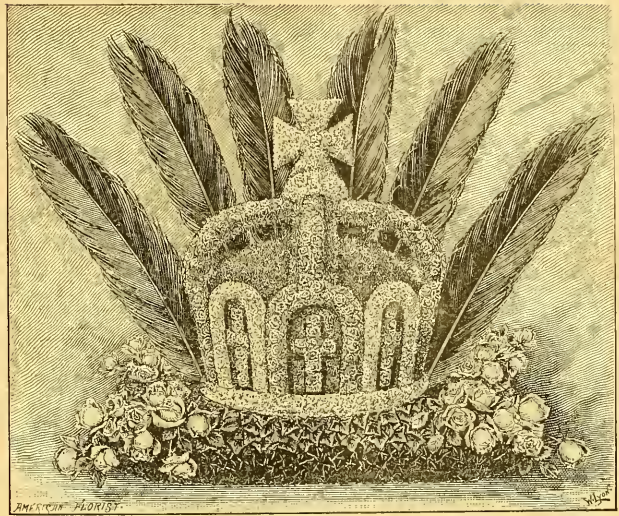
#### Plant Diseases.

At page 350 of the AM. FLORIST L. W. in writing on the above subject makes some statements, which to say the least, are rather alarming, and for a better understanding of the subject I will review in a brief way his article in detail.

What L. W. says about crowding is undoubtedly correct, and plants subjected to such treatment as were human beings in the terrible Black Hole of Calcutta would undoubtedly die, but is it possible to build a greenhouse with a single thickness of glass that is practically air tight? I for one very much doubt if it can be done, unless all the laps are putted up tight; but there is another factor in this matter besides air, i. e., light, and with most plants light is as much an essential as air. But to return to air-tight greenhouses; did L. W. ever have any difficulty in closing up the laps of a greenhouse on a very cold, windy night? If so, he must acknowledge it is a hard thing to have such a structure air tight.

With regard to a greenhouse during winter being on an average of fifteen to eighteen hours a day without ventilation, such a thing is impossible in any ordinarily built greenhouse for the reason above given, for if there is room for the wind to drive through the laps on a very cold night there is room for a certain amount of air to circulate through at all other times when not frozen tight. Further, any cultivator who wishes to keep his plants healthy will take every precaution to give all the air possible on all favorable opportunities.

"Out-of-doors" says L. W. "plants are saturated with dew during the night, in the house the opposite of this takes place—and the moisture in the air is violently abstracted on cold nights." This he says is another unnatural condition—and must be injurious to plants. True it is, if carried to extremes, but let L. W. try to grow a house of tea roses with a dew on



MEMORIAL DESIGN FOR THE LATE EMPEROR OF GERMANY.

the foliage every night in the year and I think he will very soon have cause to change his opinion as very many growers who have had dew on their plants at night have found out to their cost. There can be no similarity between dew on plants in the open air in summer and in a greenhouse in winter, for while the plants in the open air have the open winds of the universe to circulate through them, those in the greenhouse can necessarily only have a very limited amount of air without any strong breezes. In the open air the dew on the plants is one of nature's grand provisions for resuscitating the vitality of the plants after they have been subjected to the scorching rays of a hot summer sun and hot, drying winds, while in a greenhouse the plants are never during winter subjected to such trials from the very nature of their surroundings.

"In tropical forests, where vegetation reaches its greatest development," says L. W., "the tops of the trees are exposed to the full heat of a powerful sun and the roots are kept comparatively cool by the dense shade, while in our greenhouses the exact opposite of this takes place, the greatest heat rising up from the bottom while a few feet from their tops is a curtain of ice"—and infers that the system of heating our houses with pipes below the roots of the plants is all wrong. It may be; but among all the cultivators of this country there must be some who have given this matter not only considerable thought, but have actually given it a fair trial, and such would confer a great favor upon all readers of the FLORIST by recording their experience. I myself remember very distinctly—when an assistant many years ago—of talking this same subject over with several youngsters who, like myself, were working under the instructions of what we were pleased to term, in our advanced ideas, an old-school gardener; and it was after preparing, in the late fall, a bed to

plant cucumbers on for fruiting during winter, that having had to turn the material quite a number of times more than we thought necessary before finally putting it into position to plant the cucumbers, that we all agreed the old man was an old fudge, and I among the rest determined, if ever I got the chance, to grow as good or better cucumbers than he did without all the fuss about bottom heat. His beds had, for aught I know, been prepared in the same way for fifty years or more, and with a bottom heat of 75°—two higher or two lower would never do for him—and a top temperature of 65°, he always grew very fine cucumbers. Well, the time came for me to put my superior method into practice. Reasoning that the heat of the greenhouse would keep the roots warm enough without being so particular about the bottom heat, I prepared and planted a bed according to my ideas, and with the exception of the bottom heat, the chances were certainly in my favor; but I never got the fine cucumbers my old friend got from his rule of thumb practice, and after giving them a second season's trial it is needless to say that I adopted his rule, and with equally good success, as did, to my knowledge, two of my fellow "knowalls." The same rule is to-day applicable to all artificial cultivation, and only requires that the cultivator use common sense and adopt the requirements best suited to the plants he is growing.

When I first began growing roses for blooming in winter the bench system was probably hardly thought of. A good many growers had been growing them in pots and boxes, so as to get more buds from a given space during the winter than they could from plants in the bed on the greenhouse floor, where the roots were naturally in a very much cooler place than the tops; but in spring, when the sun's heat would warm the soil up nicely, what immense crops of roses were cut from the plants in borders! But



fickle fashion demanded that we should have roses at Christmas as well as Easter, and the result was we nearly all adopted the bench system, and in many cases had the heating pipes below them, though not always. "Of all the thousands of florists in this country but very few succeed in growing good flowers," says L. W. Well, many of us thought we had made some advance in the last twenty years in that line, but it appears not, and the reason is simply because we "have applied bottom heat in our greenhouses, which is contrary to nature's laws." I would like to ask L. W. if he ever tried to get very early grapes from vines that had their roots in a cool soil, and succeeded to his satisfaction? or if plants in the open ground will start to grow freely till the soil at their roots becomes somewhat warmed by the sun's rays?

I am compelled to differ with L. W. as to plants "suffering in the open air during long hot days, caused by the soil becoming super-heated." In my experience I have found that if a liberal amount of moisture can be applied judiciously at the roots during such seasons, the plants thrive amazingly if proper cultivation is attended to, and am thereupon inclined to think that lack of moisture is largely the cause of the plants not thriving in such weather, in conjunction with hot nights.

"It is a curious fact," again says L. W., "that since greenhouses were invented there has been no change in the general method of management. We still continue to apply heat at the bottom of the house and air at the top in solid blocks. Theory is squarely against this practice." Well, I advise L. W. to reverse matters entirely; give the air at the bottom and put the heating pipes on top, confine the hot air on warm days in winter at the apex of the roof, and when the house gets too hot—as I suppose it will, even for L. W.—let him put on enough bottom air to force out the heated air that has collected at the highest part of the roof, and give us his experience and the result of improved methods on the health of the plants. It will enlighten many of us.

Following this, he says "all our methods under glass are exactly opposite to nature's." This is another surprise to many of us, for to my knowledge many of us have been nursing the idea that we were trying by every means in our power to imitate nature as nearly as possible in our glass structures. But we now find our plants "in a battle field between cold air outside and warm air inside, with only a thin sheet of glass dividing the two." For my part, I must be content with this material to divide these two contending foes till L. W. can suggest a better one.

Perhaps the subject of higher night temperature will receive special attention from all of us, seeing that so many rubbish heaps have been so largely increased in size by its application; but I would ask why plants in the open air always grow much more freely (particularly roses) during September, when the nights are getting cooler, than they ever do during hot nights in midsummer? If warmer night temperature is desirable in our greenhouse, why is it not so in the open air? Lastly, I most heartily indorse what L. W. says in conclusion: "If it can be shown that the present methods are wrong, new ones will be thought out." Yes, and generally adopted, as with the prices now ruling, florists must be fully awake to all improvements to make their business pay a fair remuneration for the labor and cares it entails upon them.

Summit, N. J., March 20. J. N. MAY.



This is probably one of the most uncertain diseases that plants are subject to, for in some seasons it will show itself in places and on plants where no one would suppose there was any cause whatever for it. But from observations covering quite a number of years and varieties of plants affected I am inclined to think it is largely due to lack of moisture at the roots at a critical point during the plants growth.

One of the worst cases I ever met with in the open air was in a bed of violets about 1876. I had that spring procured a lot of violets from a man who had never forced any, but always grew very fine violets with the simple protection of sashes leaning up against a barn and somewhat sheltered from the coldest winds. The plants when I got them were in very nice healthy condition. After preparing a piece of ground for them, they were planted out and treated as is usual under such circumstances; they grew very well for sometime, till along in August we got a heavy thundershower which seemed to start them off growing very freely; after this we got a spell of very dry weather, and in about fifteen days the leaves of the plants would droop a great deal during the heat of the day. Not knowing what could cause it I dug up several plants and found them very badly club rooted; only very small clubs at this time but they grew larger all the time. At that time I also found quite a number of other plants affected with the same disease. The soil on which these plants were growing was all new to such kind of plants and so far as I could discover there was no cause to be assigned for the clubbing except the sudden drought during rapid growth which seemed to check the vitality of the plants.

Since that time I have often observed somewhat similar cases. If plants are growing freely in a greenhouse and then receive a sudden check for want of moisture they are very apt to show indications of club at the root; it may not be the dryness that actually causes club root but I am very much inclined to think it will largely assist its development. But what appears to me as rather singular in regard to this disease is that one season plants of several different species will be badly affected with club root, and the following season the same kinds of plants in almost identically the same soil and situation will be quite free from the disease. I have seen geraniums, lantanas and many other varieties of bedding plants badly affected with it in the open air, but the rose and the violet appear to be particularly susceptible to this disease. One thing I have found from experiments often tried with it, is that soil from any where near trees or having any decomposed leaves in it will always produce it more freely than soil having no such matter in it.

It is a very old disease and believed by many to be caused by some insect; it may be so, but I have never yet been able to discover any insect which I could

trace its cause to. Possibly some who have tested this matter scientifically can enlighten us on this subject; if so, it will be of great service to many who like myself are in the dark. J. N. MAY.

#### Experience with Some Varieties.

As you seem to desire expressions of opinion as to the merits of new roses, would like to say a few words in favor of the Puritan, in hopes that it may in some measure counteract the effect of the very caustic article on this rose in the March issue, from Mr. H. E. Chitty.

While I do not claim perfection for this rose, I do claim that it is worthy of thorough trial and will yet win its way to the front rank of standard varieties. With us, notwithstanding it was planted late (Oct. 1), it has proved a good, thrifty grower, and produced flowers freely, all of which I will admit were not perfect; but the majority were good roses and had nothing about them which was in the least suggestive of "cabbages." To illustrate what the buyers of roses think of the Puritan, I will state that when visitors are going through the houses they invariably stop in front of the Puritan's and exclaim: "What lovely white roses! and such beautiful foliage!" Am very confident that Mr. Chitty will change his opinion of the Puritan before the next two winters roll by.

Would like to be able to say as much for the Princess Beatrice, but from my experience the past winter, could not commend it as a suitable forcing rose; however, shall give it another trial on its own roots next winter.

Comtesse de Frigneuse has been very unsatisfactory, producing comparatively few buds and those not nearly equal to Perles in size and quality; its growth has been only fair.

Souvenir Gabrielle Drevet has done better, but is inferior to roses of somewhat similar color which are still prime favorites.

It is unnecessary to say anything in regard to Papa Gontier, as it seems to be an established favorite all over the country. A break of this variety which occurred the past winter, viz., it produced a rose as white as Niphetos.

Viscountess de Folkstone, which resembles La France somewhat in form and color (though it cannot nearly approach that grand variety in either respect), is quite a pretty rose, is a strong grower and produces its flowers mostly in clusters, which means a good many short-stemmed flowers. Think it will make a fine bedding variety. A. C. BROWN.

Springfield, Ill.

#### The Puritan.

In view of the various reports which appear in the current number (April 1) of the FLORIST, it would seem that an article of mine in a previous issue upon this subject requires no defense at my hands.

I would be glad to state, however, if permitted, that when writing that article it never once occurred to me that my remarks might place on the defensive the eminent gentleman who introduced the Bennett, and it will be a source of lasting regret to me if any words of mine are taken as intended unkindness by Mr. Evans. My opinion of the gentleman is of too exalted a character to admit of a reflection upon his honor or integrity, and the glory of the Bennett will atone

for several introductions of inferior merit. But while I am not prepared to recede from my position, I will state that should the experience of the near future determine that I am wrong, no one will accept the situation with better grace than myself or make more befitting acknowledgments.

H. E. CHITTY.

Paterson, N. J., April 4.

#### Mr. C. Ramsden's New (?) Rose.

This rose, which Mr. Ramsden proposes to send out June 1 next, is a valuable variety for winter cut flowers. I have seen it growing at his place at Morton several times this winter, always with numerous buds and flowers. The flower is about one-third larger than *Perle des Jardins* and of a pleasing creamy white color shaded with yellow; the growth is free and strong and the foliage beautiful.

I question Mr. Ramsden's right to name it, as its origin is unknown, and it will probably turn out to be an old variety. So far no one has been able to name it, although it has been shown to many of the leading rose-growers of the country; but if it is an old rose it is a good one, and, like *American Beauty*, will be valued for its qualities, no matter what it may turn out to be.

ROBT. CRAIG.

#### Why Do They Do It?

Occasionally I find it necessary to order a few young roses to sort up with, and they are invariably packed three to five in a paper and the balls squeezed together as tight as it is possible to have them; by the time they reach their destination they are about hard enough to strike fire on, and in separating the plants, frequently nearly all the roots are destroyed.

I can't see what is to be gained by the shipper in following out this old stereotyped method of packing. I have talked with a number who had similar experiences to my own, and who had the same fault to find about having their plants packed in this way. If it lessened the cost of transportation there might be some excuse for the practice, but it does not one whit. The plants do not carry in so good shape as where they are wrapped singly, and it is a disadvantage to a florist in the mail trade, who buys for immediate use, to find that he cannot shake out such plants without destroying their roots. Let us hear more about this. I would rather pay more and have them wrapped singly and not squeezed so tight.

Sharon, Pa. ALBERT WILLIAMS.

**SHEEP MANURE.**—A brother florist would like to hear from any rose grower who has used sheep manure on roses, as to proper quantity to use, and whether best in dry or liquid form.

C. F. F.

**GLOIRE DE MARGOTTIN.**—A colored plate of this new rose appears in the *Deutsche Rosen Zeitung* for March. As depicted in the plate, the rose is a rich, glowing scarlet, and of good form. Editor Metz is very favorably impressed with the rose.

#### Are Plants Manufactured Articles?

Mr. John Lane, Chicago, asks the question: "Are not plants propagated by cuttings and grafts, manufactured articles?" He thinks so, and that patented trade-marks may control propagation and sale of new plants, fruits and flowers. Mr. Lane ought to know from his long experience with patents.



DENDROBIUM NOBILE.

#### Dendrobium Nobile.

Our illustration is from a photograph of a plant belonging to Mr. W. T. Bell, Franklin, Pa. He states that there were 143 flowers on the plant at one time. This orchid is so well known and appreciated that any description is unnecessary.

#### Amaryllises.

In January my seedling hybrids were in bloom. They were three years old from the seed, and the varieties magnificent. The seeds, to begin with, cost 5 cents each, and I have about eleven bulbs for each twelve seeds sown. Surely it is better to pay a big price and get seeds of the very choicest hybrids obtainable, than to buy cheap seed and raise indifferent varieties. The care in growing good or poor sorts is the same. In February and till the middle of March A. Johnsoni grandiflora made a fine display, and now (March 21) A. aulica is coming in.

As my room is limited, I treat them all alike. After they have done blooming I report those that require it and keep them in active growth till the end of May, when I plunge the pots out of doors in a slightly shaded place, water them well and keep them growing all summer long. Early in October I bring them indoors into a cool (50° in winter) greenhouse, and lay the pots on their sides on the benches next the wall and behind the other plants. There they remain unheeded, except to clear away the decaying leaves, till after Christmas, when we keep an eye on them to lift up and bring to the light those that show flower buds coming. As it is flowers and not increase of stock that I want, I keep them pretty well pot-bound and find that they

bloom better, and if needed, after giving them a good rest, I can force them into flower a good deal earlier than they would come naturally if not forced.

WM. FALCONER.

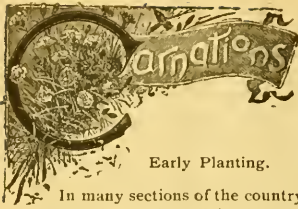
#### Delphinium Breckii.

Apropos of my note (page 326), Breck & Sons write me: "We think you must have based your ideas of the *Delphinium Breckii* on the appearance of the colored plate. If you had seen the plant growing you would admit at once that there was no similarity between it and the *Delphinium grandiflorum*. In the first place the *Breckii* is much dwarfer than *grandiflorum*, the flower stems much stiffer and the color is a most dazzling deep blue. The *Breckii* is a chance seedling raised by the late Hon. Joseph Breck over twenty years ago, and it was at one time quite plentiful around Boston although never advertised very extensively, but it eventually became nearly all lost through little maggots working in the roots, and it was only a year or two ago that we found Mr. Zirnziebel, late of the Botanic Gardens of Cambridge, had a quantity of it which we immediately procured, and it is from this stock that all our plants have been propagated.

"We do not blame you altogether for mistaking this seedling for the *grandiflorum* as there is a white tinge in the picture which should not be there at all, our artist not having made a conspicuous success in bringing out the true color, but we think you will admit that this plant is something entirely distinct and much superior to the old species. \* \* \* The plant was named '*Breckii*' by a committee of the Mass. Hort. Society after its raiser."

WM. FALCONER.





Early Planting.

In many sections of the country, the weather will now be sufficiently open, and the ground in good enough condition for planting out young carnations for next season's use. I am inclined to lay great stress on early planting for carnations and all similar stock—a touch of frost won't hurt them, providing they have been properly handled—and it is very important to get them established before hot weather sets in; during their subsequent treatment, have an eye to keeping the plants nice and "stocky." Such plants are much easier handled in the fall than tall, lanky stock. It is a little early to turn out violets, but where the practice prevails of dividing and potting the plants before planting out for the summer, the operation should be attended to at once. I have tried this plan, but can't say that I have found it particularly advantageous. I divide and plant out my violets just as soon as the ground is in working order, and the result has always been satisfactory. Potting the divisions entails a certain amount of extra labor, which every florist should avoid, if equal success can be obtained without it. I have found out long ago that we can practice economy in our methods of doing work with quite as much advantage as in the matter of coal bills, labor, etc.

A. W. M.

#### Two New Carnations.

We give herewith illustrations of the two new carnations, "Wm. Swayne" (No. 1) and "American Florist" (No. 2). The first is white, and is highly recommended by those who have seen and tried it. The second is of a rosy orange shade striped and flaked with carmine, and is a seedling raised by Mr. Chas. T. Starr, the introducer of Buttercup and other well-known varieties. The flower is a handsome one, and Mr. Starr states that it is very free and early flowering, and the blooms can always be cut with a long stem, a very desirable feature in a fancy carnation. The habit of the plant is described as similar to that of Snowdon.

#### Forcing Dutch Hyacinths.

It was with the greatest interest that I read the article on the forcing of bulbs for winter flowering, by Mr. Ernst Asmus, and which appeared in the issue of the AMERICAN FLORIST of Nov. 15. Passing over that which was said of Paper white, Roman narcissus and different varieties of Roman hyacinths, I come to the part treating of Dutch bulbs, especially hyacinths and tulips, and beg leave to offer to the American public some hints and observations resulting from a long experience in bulb-growing, which might complete and, if possible, improve the interesting article of Mr. Asmus.

I think he is quite right in stating that no other family of bulbs offers so much diversity of color and is so finely perfumed as the Dutch hyacinth. The purest white and the deepest crimson, clear yellow, blue—light and dark—mauve, rose

and nearly every shade of color will be found amongst these bulbs. It will therefore not be wondered at that these bulbs have been for a long time very popular on the old continent, including England, and are becoming more and more so in America. No other plant offering the same advantages can be produced at so low a price, and if fairly treated, the results will be always satisfactory.

It is true, as Mr. Asmus stated, that the hyacinth lacks grace, but if planted five to ten in low, broad pans, according to size of pans, all of one variety, and used for decoration amongst ferns or other green plants in suitable places, their clear colors can be shown off to advantage. The large spikes of full-grown hyacinths are difficult to use in designs. This fault might be overcome by using bulbs of the size of Roman hyacinths, producing spikes not larger than these, but having over them the advantage of color and better form. These small hyacinths, which are not yet in the trade, can be had in bloom earlier than large hyacinths, it being the intention to use them for cutting. Harder forcing does not spoil them, as long stems, which will be surely produced by the appliance of more fire heat, are rather an advantage than otherwise.

I was somewhat surprised to read that no Dutch hyacinths can be made to flower at Christmas or New Year's day in America, as the German and French bulb forcers find no difficulty in the matter. I fear the reasons Mr. Asmus gives to explain this are not the right ones, and I am of opinion that it is only caused by error in the choice of varieties. There are only a few sorts which are early enough to flower at that date, and these are bought in large quantities by the Continental growers for this purpose. For the instruction of American florists who should like to make a trial, I here give the names of these varieties, viz.: Single red, Homerus; single light blue, Emilius; single dark blue, William I.; single light red, Maria Cornelia, and double pure white, La Tour d'Auvergne. When buying these varieties—which do not belong to the cheap sorts being much sought after—it is of the utmost importance to order them from a reliable source, as in this case no substituting will do, and would only end in failure and loss. These bulbs must be potted as early as possible, and be thoroughly rooted before forcing can be commenced. The first of November they can be housed and provided with bottom and top heat of about 60° to 65° F., with as much clear light as possible.

In the last few years several new varieties of hyacinths have come to the front, and which are not yet generally known. I take here the opportunity to improve the list of varieties given by Mr. Asmus, advising florists to buy rather more single varieties than double ones, the former giving better spikes of clearer colors and forcing more readily. The following varieties can be recommended:

Double red—Noble par merite, Victoria Regina, Prince of Orange, Lord Wellington, Princess Louise, Koh-i-noor, Groot-vorst, Le Grand conquerant and Bouquet royal.

Double white—Anna Bianca, Bouquet Royal, Grand vainqueur, La Tour d'Auvergne, Miss Nightingale, Non plus ultra and Prince of Waterloo.

Double blue—Charles Dickens, Garrick, Laurens Koster, Van Speyk, Blocksberg and Comte de St. Priest.

Double yellow—Jaune supreme, Goethe and William III.

Singlered—General Pelissier, Gertrude, Homerus, L'adorable, La Reine des Janthes, Lord Macanlay, Eldorado, Mrs. Beecher Stowe, Roi des Belges, Deep shining crimson—Von Schiller, Fabiola, Charles Dickens, Baron van Thuyll, Maria Cornelia and Norma.

Single white—Albasuperbissima, Baron van Thuyll, Blanchard, La Grandesse, Mont Blanc, Madame van der Hoop, Lord Grey, Reine de Hollande, Voltaire, Pavillon blanc and La Candeur.

Single blue—Baron Thuyll, Charles Dickens, Emilius, King of the blue, Leonidas, William I., William III., Czar Peter, Couronne de belle, Grand Silas, Grand Maitre, Piepman, Regulus, Lord Derby and Lord Byron.

Single yellow—King of the yellows, Bird of Paradise, Ida Obelisque and Duc de Malakoff.

All the sorts mentioned are first rate, having, however, different qualities, some being fit for early work, others not. To enumerate all this in detail in the present article would be too long, but if found instructive, I will do this from time to time, if the editor permits, in future issues of the FLORIST, as a perfect knowledge of the Dutch hyacinth is alike profitable for the buyer and the grower. For the same reason I pass over the rest of Mr. Asmus' article, as he so thoroughly covered the culture of the tulip that nothing more needs be added.

E. KRUIJFF.

Sassenheim, near Haarlem, Holland.

#### A Despicable Thief.

A florist in western New York writes us telling the experience of a neighbor who had a seedling carnation of which he expected a great deal, and from which a visiting florist stole all the cuttings during his temporary absence. The original plant has since died, and he has therefore lost entirely that for which he had refused a good round sum, the seedling being the most promising one from a batch of 30,000.

The elasticity of some people's code of morals is certainly remarkable. The act of stealing cuttings from their neighbor's plants seems to them to be different from the act of picking another person's pocket, but where the difference is none but themselves can discover. Both are thievish pure and simple, and the first is more contemptible than the last in some respects.

#### The White House Conservatories, Washington.

A handsome *Cycas revoluta* in the conservatories was, says Mr. Pfister, presented to George Washington by a Baltimore merchant. The plant is supposed to be about 250 years old.

Adiantum ferns are here grown in hanging baskets to use in decorating and also to cut from. They take up less room in this way, and Mr. Pfister thinks they can obtain more cut fronds from them than when grown in pots on benches.

Some fine specimens of *Nephrolepis davalloides* ferns are used for decorating with excellent effect and are highly thought of for that purpose.

A self-registering thermometer seen here is an excellent thing for those who can afford it. A paper dial is changed every twenty-four hours and during that time the changes in temperature are traced on it in red ink. If the fireman slights his work during the night he has

an accuser which cannot be bribed. The cost of this thermometer is \$30, and the average florist would not feel like sprinkling them through the greenhouses any thicker than absolutely necessary.

A beautiful amaryllis—white striped with rose, was in bloom and bore the name of *Desire d'Artoise*.

Superintendent Pfister has a superb strain of cinerarias from seed of his own selection. He calls it the *White House* strain. You may look but you cannot buy.

The halls and rooms in the executive mansion are kept decorated with palms and blooming plants placed at intervals on suitable stands. They are replaced with fresh plants from the conservatories as often as necessary to keep them in best condition.

#### Prices of Bedding Plants.

A correspondent writes asking if any plan has been adopted by the various florists' clubs to regulate the prices of bedding plants the coming spring.

We understand that the *Des Moines*, Ia., club attempted something of the kind last year, but did not meet with very gratifying success in maintaining scale prices, and that they will not make any attempt to arrange a scale for this year.

We seriously doubt the ability of any organization to successfully regulate the prices of plants and flowers. The difference in quality of the products of various growers would render unjust any uniform scale, and if the stock should be graded by an inspector—as is done with grain, etc.—we fear that the inspector would suffer bodily harm in the controversy which would follow each inspection, for we have yet to meet the florist who will admit that he grows stock which is several grades lower in quality than that of his neighbor.

#### Diseased Eupatorium.

ED. AM. FLORIST.—I forward by mail branches cut from my eupatoriums which were planted in the greenhouse last October. The roots are healthy, the plants producing green buds on dead stems, as you will see by the branches sent. My plants have acted this way for four years, producing buds on dead wood but no blooms. I use surface water. I grew the same variety for fifteen years in Cleveland, O., and it never acted so there.

Green Bay, Wis. SUBSCRIBER.

[The branches sent were apparently perfectly dead except at the tips, where were a few pale green leaves and a head of unopened flower buds. We could not discover the presence of any insect or fungus. Can any of our readers throw any light on the matter?—Ed.]

#### The "Paradise" Apple.

A circular on my table calls to mind that very numerous individual, the nursery salesman, or tree-peddler, as he is popularly termed. I must confess that I have a positive weakness for these gentlemen, because I rarely meet one without being vastly entertained, and a look through the agents' album of impossible fruits and flowers is in itself a rare treat. The last tree-man whom I had the pleasure of meeting was making a special offer of "The Paradise Apple," the identical fruit on which our first parents feasted with such disastrous results to themselves and their posterity. I have often lamented that the eating of a common apple should have caused so much



TWO NEW CARNATIONS. NO 1, "WM. SWAYNE," NO. 2, "AMERICAN FLORIST."

trouble. I have regretted Eve's weakness, but after seeing an "exact representation" of the fruit, in the agent's album, I realized that Mother Eve had been subjected to no ordinary temptation. The price—three dollars per tree—was not exorbitant, everything considered, and I have often since regretted that I did not invest, for it would be very interesting to possess a tree of the same variety grown by Adam when he did business at the old stand in the Garden of Eden. I hinted something of this to the agent, who suddenly left, under the impression that I was poking fun at him, but if this should meet his eye he will notice, and I hope appreciate my efforts to make amends, by giving publicity to the Paradise apple. Of course he found purchasers, each of whom added another to the list of human moths who get their wings burnt in the same way every year. I have not a particle of sympathy for the tree-peddler's victims, in fact I like it; but I really think that the ridicule so freely heaped on the man should properly be bestowed on his frequently unprincipled employer. A large number of the tree-peddlers who harass the country are men who, being out of employment, become attracted by the gilt-edged advertisement of some unscrupulous dealer in

nursery stock. Their entire knowledge of horticulture is carried in their pockets, and consists of the pictorial volume furnished by their employer, who alone is responsible for the blue roses and other novelties sold by the agent. I have a splendid, double-flowering strain of contempt for the man who sends out an agent to sell plants that are only to be found in that agent's scrap-book. There are reputable firms who never offer anything they can't furnish, who fill their orders correctly, and who, if they do send out a salesman, are careful to send out a man of intelligence and conversant with his calling; but these latter do not represent a very large majority in the noble army of nursery salesmen. A. W. M.

CONTINUOUS BLOOMING CHRYSANTHEMUM.—D. Lee & Son, Madison, O., send us blooms of chrysanthemum "Curiosities," the young plants of which, they state, are now well filled with buds. They write that "this variety has the habit of blooming early in fall, as well as more or less all summer, and again quite freely in spring. It is the nearest approach to a perpetual blooming chrysanthemum that we have ever grown." The blooms are about two inches in diameter, and of a lilac shade.



## Steam Heating.

BY W. H. ELLIOTT.

The importance of greenhouse heating is perhaps appreciated as well by gardeners as any subject in connection with the florist's business. He is sure to be reminded of its importance at least once a year—that is, when he has his coal bill to pay. The desire to reduce the amount of this bill has led to a great deal of experimenting and changing, the benefit of which has often been doubtful, for if the coal bill is small, which it often is not, it may have been more than balanced by extra labor and greater risk.

The requirements of the business will settle or has settled the question of greenhouse heating at the present time, as it has done in the past. Years ago, when the business was limited and greenhouses seldom built over fifty feet long, and those devoted to growing a variety of plants, the brick flue was all the heating apparatus required. I doubt if steam would have answered any better, as you could grow a large variety of plants in one house by growing plants requiring a high temperature in the warm end, and those a low temperature in the cold end. When the grower found the business required a large quantity of one kind of flowers, he then had to devote a whole house to one kind of plant, and that house was better to be one hundred feet long than fifty. It became necessary to have a better heating apparatus to heat a large house, as fires required too many fires and the uneven temperature was unsatisfactory. Hot water then proved to be just the thing required, the brick flues began to disappear, and the water apparatus to take its place, not so much because of its superiority, but because it was better adapted to the condition of the business. Hot water then became for many years the only method of greenhouse heating, but the business has been growing; the increase in the last ten years has been wonderful. Now the 100-foot house is not long enough; the grower keeps on building and putting in one hot water boiler after another, until when you ask him how many fires he runs he is unable to count them.

It is about time he made a change to some system by which he can heat his place from one central station, with not more than two or three fires. The only practical system by which this can be accomplished is by steam. Hot water under pressure has been tried by a number of growers, not with the idea that you would heat more space with one fire, but that there was a great saving in fuel over the old method. Those who have tried it have met with very satisfactory results in some cases, and decidedly unsatisfactory results in others. It is doubtful if there is any advantage in this system over the old, except the use of smaller radiating pipes holding much less water; the pipes become cool much quicker, and become heated much hotter in the boiler, causing a quicker circulation, which is an advantage. But when they put the water under pressure and heat it above the ordinary boiling point, without any automatic regulator, would seem to be trusting too much to chance. Connecting the apparatus with the city water pressure takes away all chance of working either an automatic regulator or safety valve. The only chance of safety with that arrangement is never to have the boiler pressure higher than the city water pressure, and there is no way of telling how much the boiler pressure is; even if you use a steam gauge it will

only register the city water pressure. That this arrangement has been worked is well known, but the risk is greater than there is any need to run.

If you want small pipes and quick circulation, why not use steam, which is safer and has many advantages over water under pressure at its best? Reference is often made to the Boston Heating Co. to prove that water under pressure is practical, or so large a company would not use it. The way they use it, it may be practical, but there is about as much comparison between a greenhouse apparatus with city water pressure and the Boston Heating Co.'s system as between a kerosene stove and a blast furnace. In the greenhouse apparatus the pressure does not help the circulation, which is caused by gravitation, with the force of a few ounces at the best. In the other case the whole pressure of 400 pounds is used to create a circulation which causes the water to flow through the main supply pipe at the rate of fifteen feet per second, from which it is taken into the buildings to be heated by a very small pipe, not more than one inch for a large building; there it goes into a converter and is converted into steam, which is used to heat the building; so after all it is steam heating, the water only being used to convey the heat.

Steam for greenhouse heating is now an accepted method. The large places cannot very well do without it, and many small places are using it with very good results. There is not practically very much difference between steam and hot water, but what difference there is in favor of steam on all points. It is safe to say that the steam apparatus, properly constructed, will heat the hot water apparatus on every point; it meets the requirements of the business better, less labor to run, is safer, gives a more even temperature, the apparatus costs less, uses less fuel, and is easier to repair in case of accident. It is expected that this statement will be doubted by many who have tried steam. This superiority is only claimed when the apparatus is properly constructed and properly taken care of, the same being allowed the water apparatus.

Under the head of proper construction much more than I shall be able to say might be said. First, it must be understood that there are two distinct ways of running a steam apparatus—one is as it is run on large places where there is a fireman on duty all night and can attend to the fires as often as necessary; the other, when the fires are made up in the evening to last until morning, eight to ten hours without attention. A grower putting in an apparatus must first make up his mind on which plan he will run it. If he has over 15,000 square feet of glass he had better have a man on duty all night, in which case it will be well to use a tubular boiler, the capacity of which will depend on condition and location of house and on kind of stock grown. To grow tea roses it would take at least a 30-horse power boiler for 15,000 square feet, and it would be better to be more, but of course with a man on duty all the time a boiler can be run to its full capacity, which is about 200 running feet of 1½-inch pipe to each horse power. If the grower has less than 15,000 feet and wants his apparatus to run all night without attention, a cast iron sectional boiler with a slow fire will be better. A tubular boiler does not work as well with a slow fire as the cast iron sectional. There is no danger of cracking a cast iron boiler with a slow fire and plenty of

water, but there is when you force the fire or if the water gets very low.

There has been considerable disappointment in the use of cast iron boilers, the reason being that they have been put up in a way that they would need constant attention, and have been expected to run eight or ten hours without attention, which could only result in disappointment. If you wish to run a slow fire you will need a good deal more boiler capacity, say one horse power to 125 feet of 1½-inch pipe, where on the other plan you can run 200 feet. There are a great many kinds of cast iron boilers made, without much choice between them, all working well when properly put up and properly cared for.

In locating the boiler, it should be as central as possible and as low as possible—low enough that the water-line in the boiler will be two feet below the lowest radiating pipes. When you have your boiler set up you will then be ready to run your main pipes. The plan of running main pipes overhead should not be adopted when they can be run under the walks at the ends of the house, with the supply pipes taken out of the top, in which case it is better to have the main pipes covered. In regard to size of mains and supply pipes, a 5-inch will supply 15,000 feet of 1½-inch pipe, 4-inch 8,000 feet, 3-inch 4,000 feet, 2½-inch 2,000 feet, 2-inch 1,000 feet. Supply pipes—that is, the branches from the main—should be as follows: 1½-inch pipe for 500 feet of 1½-inch pipe, 1½-inch for 250 feet of 1½-inch pipe. If the houses are to be run at a low temperature a little larger supply should be allowed. The radiating pipe should be 1½-inch, which will give the same amount of heat as a 4-inch water pipe. The easiest way for a gardener to tell how much steam pipe to put in a house is to put the same amount of 1½-inch pipe as he would 4-inch water pipe. When a number of pipes are run in one stand they should be connected by a manifold valve at the ends; this will enable you to heat one, two or more pipes as you wish. In a house of twenty feet wide or less the pipes should be so arranged that you can heat one pipe, as that will give all the heat needed in mild weather. In putting in these stands of pipe one end will need to be turned across the end of the house before they are run into the manifold, as that will allow for expansion, the last connections being made with a piece of pipe with a right-hand thread on one end, a left on the other. On the manifold farthest from the boiler there should be an air valve. The return should be one size smaller than the supply, and should be run back to the boiler as quick as possible.

There are two very important things in steam piping. First the pipes must be so run that the water caused by the steam condensing be returned as quickly and freely as possible to the boiler. The other is that the expansion of the pipes be allowed for; if not allowed for the expansion will break the connections. The most important thing comes when you have your apparatus all in—that is, the care and running of it. Keep your boiler well cleaned, fire evenly and often, run the steam pressure low, but not so low that you will lose all pressure when you put coal on the fire, keep up pressure enough to keep all the pipes full of steam, and you will not be disappointed with "steam heating."

[Read before the Gardeners' and Florists' Club of Boston, Feb. 7.]

## Rhapis Flabelliformis.

As the demand for decorations of tropical plants is continually on the increase and collections of palms and similar plants for the purpose of supplying this demand are being formed by live florists in all large cities, the question as to which of the palms are the best for the purpose is one of considerable interest.

Mr. Henry Pfister, gardener at the White House conservatories, Washington, has two fine specimens of *Rhapis flabelliformis* in tubs about two feet in diameter. He considers it to be the very best palm for house decorating as it stands the rough usage incidental thereto better than any other. While this palm can not be increased as rapidly as it could be wished, it would seem that it would be well for palm growers to make an effort to work up a good stock of such a desirable thing.

Daily Record of Work Done at the  
Lincoln Park Greenhouses,  
Chicago, 1887.

April 16—Tem., morning 42°, noon 45°, evening 40°. Wind NE. Repotted geraniums. Divided and potted *Achyranthes metallica*. Prepared temporary frames for cannas, etc. Spaded rose beds.

17—Tem. 42, 46, 45. SE. to NE. Sunday.

18—Tem. 39, 43, 41. ENE. to N. Repotted young geraniums into 4-inch pots. Divided and potted *Achyranthes metallica*. Potted celosias from boxes into 3-inch pots and plunged in hotbed.

19—Tem. 40, 65, 57. W. to SW. Same as yesterday, and pricked out in frame dwarf Phlox Drummondii and petunias. Plunged little dahlias in hotbed.

20—Tem. 50, 58, 50. W. to WSW. Potted and plunged in hotbed *Cineraria candidissima* and *Verbena venosa*. Plunged ricinus in warm frame.

21—Tem. 50, 53, 50. W. to SE. to SW. Potted and plunged *Verbena venosa* and petunias. Potted othonna clippings. Pricked out in frame gomphrenas, petunias and phlox.

22—Tem. 50, 57, 63. SE. to S. Potted and plunged petunias, calceolarias and oxalis. Commenced repotting coleus into 3-inch pots. Commenced starting cannas in frame.

23—Tem. 38, 42, 40. W. to WNW. Same as yesterday.

24—Tem. 40, 50, 45. W. Sunday.

25—Tem. 35, 54, 52. W. to WNW. Continued work commenced on the 22d, and shaded beds of fancy shrubs.

26—Tem. 39, 50, 42. NNW. to E. Same as yesterday, and commenced to start erythras in frame.

27—Tem. 46, 52, 48. N. to SE. Continued repotting coleus. Started caladiums. Watered tulip beds. Potted and plunged torenias in temperate frame.

28—Tem. 56, 68, 60. WNW. to N. Trimmed and cleaned alternantheras. Nipped coleus. Commenced digging beds at south end of park.

29—Tem. 47, 51, 52. NW. to SE. Potted oxalis seedlings. Pricked out asters in frames.

30—Tem. 55, 64, 70. SE. to S. Same as yesterday.

## Hail Insurance.

The great storm that raged around New York and Philadelphia on March 12 wrecking many greenhouses emphasizes the necessity of making hail insurance a permanent success. If every florist in



RHAPIS FLABELLIFORMIS.

the United States were to insure only a portion of his glass, it would be possible to include not only hail, but great falls of snow, wind and other disasters that might overtake the fragile establishments of florists. So admirable is the plan adopted that with gathering strength we turn our eyes to what may be possible in the future. The disaster above referred to ought to teach our eastern brothers that the west does not own a patent upon snow drifts and hail storms, and if it is possible to "see the west" and "go it one better" on snow storms, may we not be able to discount them on hail in the near future. The moral is, that every florist ought to be a member of the "Florists Hail Association," and by joining you will have the satisfaction of knowing that you have given your atom towards making an admirable plan of insurance a perfect success, besides reaping a permanent personal benefit in being insured against loss of glass.

JOHN G. ESLER.

## The Badge Again.

Friend Murdoch makes a good suggestion in regard to the combination of badge and ribbon for S. A. F. meeting. Now I trust "the powers that be" can be persuaded, in deference to the strong sentiment shown at Chicago, to make this ribbon also a means of mutual identification, by states, numbers or some sign. As is well known, the American Association of Nurserymen have such a plan in practical and successful operation, and it is an easy matter at their meet-

ings for any member to identify any other member present. That this is highly desirable, no one will gainsay who has experienced the extreme difficulty in finding those present known only to him through correspondence. Some of our officers who are known to and know everybody, "pooh-pooh" this and cry "chestnut," because they don't feel the need of any such plan; but the most of us would be very glad for any means whereby we could readily become personally acquainted with our friends of correspondence. The matter could be so arranged as to avoid any actual expense to the S. A. F.

For the information of many who have never heard of the nurserymen's plan, it may be briefly described: Each member upon registering as present is given a badge with a number plainly printed on it, which number has been assigned to him when his dues were paid (which should be previous to the meeting). He is supplied with a "badge book" of convenient size for the pocket, which contains both numerical and alphabetical indexes of all members who have paid up to, say, a week previous to the meeting; later ones are provided for by a supplement. The practical operation of this can be easily understood, and it has a further advantage in bringing in the dues before the meeting.

It is hoped the executive committee will look carefully into this matter, which was referred to them at the Chicago meeting.

J. HORACE MCFARLAND.



## New Notes.

MACON, GA.—D. B. Woodruff is building two new houses, 11 x 50 feet each.

LAWRENCE, KAN.—Season is very backward here, but trade is better than usual.

LAKE GENEVA, WIS.—Thos. H. Price, the florist, is laid up with inflammatory rheumatism.

ROCKFORD, ILL.—J. J. Soper has just completed two new houses 16 x 50 each, heated by steam.

GERMANTOWN, PA.—Wm. P. Kulp will soon build six new houses 20 x 110 feet each. They will be heated by steam.

AKRON, O.—S. Hibbs this fall built two greenhouses and branched out into floriculture, in addition to vegetable growing.

PORTLAND, ME.—Kendall & Whitney are now established in their handsome new building at the corner of Temple and Federal streets.

ELIZABETH, N. J.—John White has a house of Niphetos roses of which he is justly proud. They are probably the finest in the state.

KANSAS CITY, MO.—Gugel & Gregorius have dissolved partnership. The business is continued by Henry Gugel at 1012 Barnett street.

NASHVILLE.—The local daily booms trade by publishing a 2-column article with names of leading flower buyers with their favorite flowers.

ST. PAUL.—C. Haupt has sold his place in West St. Paul and has bought a new place about three miles from the city, where he will build two new greenhouses this summer.

TOPEKA, KAN.—Mr. James Hayes, a former successful florist of Boston, now located here, is already furnishing this city with roses equal to the best produced in the east.

BLOOMINGTON, ILL.—The Bloomington Nursery Co. have just completed a new greenhouse 300x24. It is heated by steam. Water pipes for connecting hose are placed every forty feet.

BERWYN, PA.—The first thunder-storm of the season arrived on schedule time March 21, P. M., accompanied by hail the size of large peas. No damage to glass in this vicinity that I hear of.

SPRINGFIELD, MASS.—Mr. A. F. Leonard, formerly with B. L. Bragg & Co., has purchased an interest in the New York Floral Co., of this city, and is now treasurer of that concern, which will branch out into the seed trade.

WINTER PARK, FLA., MARCH 26.—Double petunias, geraniums and daturas are now in fine bloom here. Gladioli are budded. Hibiscus, clerodendrons, morning glories, etc., have been blooming all winter; even tuberoses have bloomed at intervals all winter out of doors.

WILMINGTON, DEL.—The Delaware and Maryland Peninsular Hort. Association will hold a show of fruits and flowers in this city the third week of next September which is promised to far surpass any exhibition heretofore held in this section. The prizes will aggregate over \$2,000. Competition will be free to all.

ST. JOSEPH, MO.—Samuel Murray recently joined the establishment of Hans

Nielsou. He has been head gardener for John Hobart Warren at Iloosick Falls, N. Y., for five years, having previously graduated from Peter Henderson's. His roses were said to be the finest grown at any private place in the vicinity of New York.

THE BROOKLYN Times says of Mr. John Henderson's place at Flushing: "The greenhouses if joined together would be more than a mile in length. Sixteen boilers are used, burning 500 tons of coal, four tons of tobacco stems are burned, and 100,000,000 roses sent away every year." One hundred million is a large number.

HARTFORD, CONN.—At the annual meeting of the Hartford County Hort. society, the treasurer's report showed receipts of \$264.87, and expenditures of \$192.68, leaving a balance on hand of \$72.19. A local seed firm offered \$100 in prizes for vegetables grown from seed bought from the firm. Officers for the year were elected as follows: E. B. Smead, president; J. H. Hale, vice-president; G. W. Hubbard, treasurer; G. E. Hoadly, secretary.

JEFFERSON CITY, MO.—At the funeral of Governor Marmaduke, Dec. 31, an immense quantity of floral designs and loose flowers were used. One piece was in the form of three arches, representing the three stages of life—infancy, youth and maturity. At the base of the smaller arch a white dove rested, a symbol of the new-born babe's entrance into the world. At the top of the last arch a dove with outspread wings represented the flight of the soul to its eternal home.

GLENN COVE, N. Y.—The blizzard of March 12-13 blew down several of our trees, broke branches off others, and split our evergreens very badly apart. The weight of snow broke a good deal of glass, tore the gutters off the south side of our greenhouses, and smashed in several hotheaded sashes, breaking the woodwork of the sashes. The snow wreathed on the south side of buildings and shutters, and some of the wreaths reached up to the ridge pole of the greenhouses. Snow fell some three feet deep on the level.

ELMIRA, N. Y.—At the funeral of Bentley, the heroic fireman—one of the victims of the disastrous Elmira fire Feb. 19—the floral decorations were unusually elaborate and profuse, occupying a prominent part of the funeral march. Some of the more prominent pieces was a book and ladder surmounted by a star, a scroll with the words "Honor the brave," a fireman's hat of excellent outline and finish, a large broken column of Mermet roses relieved by blue Roman hyacinths and Seawan carnations. White violets were largely used in the construction of the work, in charge of florist Grove P. Rawson. Mrs. H. D. Wells also furnished several designs of superior finish.

## For Decreased Postage.

That 4-cent per pound postage bill has not yet been passed. Have you done your part? Have you written your representative in Congress to support it? If not, do not be disappointed if it is not passed. Immediate action is necessary. Start a flood of letters to Washington which cannot be ignored by the recipients. Write also to Hon. Charles H. Allen and Hon. Benjamin A. Buloe, both at Washington. Don't delay. Attend to it at once.

## SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant ads. not admitted under this head.

**SITUATION WANTED**—By a first-class gardener: a man of long practical experience in all branches of horticulture; married, without family. Address FRED WEBBER, Morristown, New Jersey.

**SITUATION WANTED**—By German florist and vegetable gardener; private or commercial; English, and 27, references first-class as to ability. Address CHARLES LENKEL, Monroe, N. Y.

**SITUATION WANTED**—By a young man as florist. Understands propagating especially and growing roses; has had good experience in retail florist's nursery. G. F. KIERES, care Mrs. Willis, Versailles, Ky.

**SITUATION WANTED**—By a first-class gardener: Scotchman; single; well up in all departments, orchids, roses, flower and vegetable gardening. A 1 references. THOS. PATISON, care of R. Campbell, Utica, N. Y.

**SITUATION WANTED**—As gardener; understands greenhouse and stove plants. Orchids a specialty. 12 years' experience in the great seedling Orchid Nursery, St. Albans, England. Address J. A. FITZGERALD, Fitchburg, Mass.

**SITUATION WANTED**—By a young man of 8 years' experience; good grower of cut flowers, bedding plants, roses, and a good rose grower, in private or commercial place. Address, stating wages, etc., S. W. JOHNSON, Evergreen Lodge, Clarksville, Tenn.

**SITUATION WANTED**—As gardener florist; married, aged 36; private or commercial; thoroughly versed in the cultivation of roses, evergreen and greenhouse plants, vineries, fruit and flower garden and all other branches of the profession. Address A. B., care W. J. Stewart, 61 Highland St., Boston.

**SITUATION WANTED**—By single man, strictly temperate, 12 years' experience in all the services to florists. An experienced rose and general plant grower—none but those requiring services of a thorough man need reply, and need replying will please state terms. Address LO. Florist, West Chester, Pa.

**SITUATION WANTED**—On a gentleman's place as head gardener, thoroughly conversant with all branches of the profession; has made a special study of orchids and fancy plants, and has collected them in South America; served time with Hon. Eustis Curing of Albany, N. Y. Married, small family; best of references. Address R. M. GHEY, (care Wm. Grey), Kenwood, Albany Co., N. Y.

**WANTED**—Three thousand feet of second-hand 4-inch greenhouse pipe, in good condition, for sale. Address E. J. J. MOSES, Buckport, Me.

**WANTED**—By young man (23), situation as manager or foreman of either private or commercial establishment; good references. Address, A., care J. Gardner, Johnston, N. J.

**WANTED**—A man as foreman that thoroughly understands the growing and forcing of roses, in one of the largest establishments in the city of New York; must be temperate and capable of making entire charge of the business. A man must be accompanied with references up to ability, character, and salary expected. Address H. J. LEMMER, P. O. Box 265, New York.

**FOR SALE**—Greenhouse 80x24, cottage 30x23, lot 24 x 30, wide alley at rear, boiler at rear, cold water pipe in city; at horse cars. Price, \$1,500. B. B. WILEY, Room 2, Times Building, Chicago.

**FOR SALE**—Two Hitching's corrugated boilers, No. 15, and about 400 feet of Hitching's pipe and fittings. Will be sold cheap, and can be delivered any time after June 1. Address W. H. ROSE, Leavenworth, Kan.

**FOR SALE**—The best retail florist's and seedsmen's business in the West (population 100,000). Reason for selling, with full particulars furnished on application. Address BATA, care American Florist, Chicago.

**FOR SALE**—In a western city of 12,000 inhabitants, a good central location, one acre of ground fine dwelling house, three greenhouses 200x60 ft., at a bargain. Must be sold before June 1st, or terms adjusted. Address JNO. B. GAMBRIEL, 151 California Avenue, Chicago.

**FOR RENT**—On shares, or low cash rent. Greenhouses, 7,000 feet of glass, large grounds near business center of the capital city of Iowa; steam heat, with battery of boilers, well stocked and good trade in plants and cut flowers. Will aid with capital a reliable tenant. Population of city near 50,000 and now booming. Address COLE'S CONSERVATORIES, Des Moines, Iowa.

**GREENHOUSE FOR SALE**—Belonging to the late Alexander Greenhaw, in Braintree, Mass., ten rooms, ten acres of ground, two greenhouses, heated by hot water; one in Ten roses; one in Hybrid; one Pink house; one Violet house. Each of the above has a fine view of the place, recently introduced. There is a cottage house of six rooms, and a house of twelve rooms; stable, wagon shed and one and one-quarter acres of land.

Price of house.....\$2,000.  
Price of cottage.....1,000.  
Price of greenhouses.....500.  
It will sell whole for.....7,500.

**HOLBROOK & FOX,**  
12 Postoffice Square, BOSTON, MASS.







## THE CUT FLOWER TRADE.

### April Floral Fashions.

Easter wedding styles are of the most chaste description. They show an adherence to the long favorite pink and white colors, as do the designs made up for the steamer trade, which has just opened. The popular rose for room decoration is the La France, which has more grace for the formation of portieres than any other flower of its species. The head of the drawing room, when the mirror fills the space between windows, is no longer selected for the chief floral effects, the wedding ceremony or position for receiving. In the arrangements of modern parlors, with their bay windows and arches, a place is selected where a floral curtain is hung and looped very high, the main portion of the curtain hanging straight. The curtain is composed of La France roses and lily of the valley, and looped with Farleyense ferns. Pink and white blooming plants, such as azaleas, rhododendrons, mountain laurel and hydrangeas, are put in a crescent, leaving the curtain as a background. Longiflorum lilies are also used extensively in the plant arrangement. These are very much preferred to L. Harrisii.

The floral garniture on bridal dresses is very simple. Sprays of orange blossoms form a point at the waist and spread out towards the bust. Skirts are free from flowers excepting where the drapery is fastened. A true lover's knot is made with flowers and silver wire, orange blossoms, hyacinths, and lilies of the valley, working in very neatly. A knot of this kind is placed on the left side of the drapery, and also fasten the veil, unless a diamond knot is used. The latter is the favorite gift of grooms at present. This emblem is quite the rage now, appearing more often than other floral designs. For reception dresses and bridesmaid's gowns, white heath forms the garniture for the bodice, with a studding of gardenias in the drapery of the skirt.

Bride's bouquets are either very large or quite small, but the bunch is formed of orange flowers exclusively, unless ordered of a florist who is unprovided, when lily of the valley is substituted. The large bunch of orange flowers, made up loosely with large sprays, is a delightful ornament, but costs from \$30 to \$50. Sometimes a small cluster is carried in the hand, when a prayer book is to be used.

Favors for dinner decoration are again fashionable. The demand is for a specimen rose, a cluster of mignonette, and a few small fronds of Farleyense fern. Silver dishes are used if roses are to be the blossom with which the board is embellished. All kinds of silver receptacles are brought into use, even wine coolers, to hold the immense roses. Generally, however, what are known as "spring flowers," are laid in clusters through the

table, a high mound in the center showing off blossoming shrubs. A mound of syringa and a table laid out with the dainty cosmos among grasses, was the ornamentation of a young lady's birthday dinner last evening.

Pink baskets, and low wicker trays planted with blossoming bulbs, are in demand for steamer gifts. The pink baskets are nearly all made up in the French fern baskets, Capt. Christy, La France, Gabriel Luizet and Mermet roses being clustered on one side with only a few spikes of mignonette for contrast. On the other side are the same roses, with a cluster of lilies of the valley, to make the pink and white mixtures, now the rage. The handle of the basket is wound with a pink ribbon and finished with loops and long ends. The trays of blooming bulbs are much appreciated for their lasting qualities on an ocean trip.

New York. FANNIE A. BENSON.

### New York Retail Prices.

Selected Beauties, Baroness and other hybrids 75 cents each, the average run selling at from 35 to 60 cents; Puritans 50 to 75 cents and perfect Jacobs 50 cents each, average quality \$3 a dozen; La France, \$2.50 to \$3; Mermets, Brides \$2; Perles, Goutiers, Niphetos, Souvs \$1; lily of the valley, tulips, narcissus, daffodils 75 cents to \$1; carnations 50 cents; Lilium longiflorum 50 cents and L. Harrisii 35 to 40 cents each; mignonette 50 cents a bunch of a dozen sprays, the giant variety 15 cents a spike; lilac 50 cents a spray; violets, Maria Louise \$1.50 and Russian 75 cents a hundred; smilax 40 cents a string; Asparagus tenuissimus 75 cents and A. plumosus \$1 a string.

### New York.

Wm. C. Wilson has rented the store long occupied by Donoghue, on Fourteenth street, near Fifth avenue.

Peter Henderson has returned from Florida.

Bird, of New Jersey, sustained quite a loss and caused much disappointment by not bringing in Japanese snowballs for Easter. (Every snow ball of which was sold before hand, by the way.) The week of dark weather previous to Easter was the interfering element.

There are quantities of Dutch bulbs in storage in this city awaiting opportunity for sale by auction.

Alex. McConnell made a wedding decoration this week, when the entire walls and ceiling were covered with smilax. A wire frame was formed over the walls to hold the greenery. A large white floral bell was suspended in one corner where the ceremony took place.

A wedding decoration made at New Haven by Hanft Bros. for the nuptials of a daughter of Stephen Whitney, was a delightful arrangement of old fashioned

flowers. Candytuft, marigolds, pansies, and pinks were banked on the mantel pieces, made into low flower plates, and filled into pots and jars, as was done in olden times. There was no effort for effects, but the drawing rooms looked charmingly.

During the visit of the society of American florists to New York, next summer, a convention of the pure food advocates, from all over the world, will be held at Schutzen Park, which is to be laid out elaborately by an experienced landscaper to display the most approved methods of ornamental gardening.

A new arrangement of ivy on a cross developed Easter, was trailing vines o young growth of this plant over the bedding of leaves. The tender, young, small leaved trailers extended from one arm across and down to the base. Longiflorum lilies were from the base in proportion. This design was made for a grave at Woodlawn.

A POINT for the S. A. F. regarding dues. I am informed by an ex-secretary of the National Photographers convention or association, who resides in this city, that their membership and funds have been managed successfully through charging a stated admission fee of members when joining the association and annual dues besides. Non-payment of dues for two years forfeits membership, and in order to hold membership again another admission fee must be paid. Membership admission fee should of course be of greater amount than the sum of annual dues for two years.

L. B. D.

GONIOPHLEBUM SUBAURICULATUM is considerable of a name, but the plant is one of the handsomest basket ferns that I know, and although well adapted for decorative purposes, it is seldom found in commercial establishments. When planting, a little moss should be mixed with the soil; keep in a temperature of 50° to 60°, give plenty of water, and the basket will soon be a mass of beautiful pendant fronds four to six feet long. The fronds stand well after being cut, and the plant soon furnishes a fresh crop. It is a fern which every florist requiring good decorative material should grow.

A. W. M.

DOUBLE-HEADED TACKS FOR HOLDING GLASS—Around Pearl River, instead of points or brads for glazing, double-headed carpet tacks are used, and I can very highly recommend them. I believe my neighbor, Mr. J. J. Blauvelt, has the credit of first introducing them. Two tacks only are required for each square. They are placed at an angle, so that one point binds the upper and the other the lower one. They are easily driven, are permanent, and if at any time they require to be taken out, it can be easily done.

J. T.

**THE AMERICAN FLORIST**

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 Cents a Line, Agate;  
Inch, \$1.40; Column \$14.00.  
Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per  
cent; 12 months, 20 per cent.  
No reduction made for large space.

The Advertising Department of the AMERICAN  
FLORIST is for Florists, Seedsmen, and dealers in  
wares pertaining to those lines ONLY. Please to  
remember it.

Orders for less than one-half inch space not accepted.

Advertisements for May 1st issue must  
REACH US by noon, April 25. Address.

THE AMERICAN FLORIST CO., Chicago.

**Catalogues Received.**

J. D. Carmody, Evansville, Ind., plants;  
Chas. T. Starr, Avondale, Pa., plants; B.  
A. Elliott Co., Pittsburg, plants; Oread  
Greenhouses, Lawrence, Kan., plants;  
M. B. Faxon, Boston, Mass., seeds; Falls  
City Wire Works, Louisville, Ky., wire  
designs; W. H. Cassell, Canton, Miss.,  
trees and plants; Specialty & Novelty  
Seed Co., Newton, La. Willows, Lancashire,  
England, seeds; John S. Hay,  
Oceida, N. Y., plants and seeds; V. Le  
Moine, Nancy, France, plants; E. Hip-  
pard, Youngstown, O., ventilating appar-  
atus; E. G. Hornbrook, Bernwyn, Pa.,  
plants; Jacob Schuch, Louisville, Ky.,  
plants; F. O. Willard, Fitchburg, Mass.,  
plants; L. J. Stuppy, St. Joseph, Mo.,  
plants; Fred W. Keiser, New York, trees,  
shrubs and plants; Ed. Hubbard, Boulder,  
Colo., plants; A. Gilchrist, Guelph, Ont.,  
plants.

THE PROGRAMME of the Pennsylvania  
Hort. society for 1888 has been received.  
Copies may be obtained from Secretary  
Farson at Philadelphia.

THE CANADIAN HORTICULTURIST for  
March contains an excellent portrait of  
President P. J. Berckmans of the American  
Pomological society.

THE LINNEAN SOCIETY of New York  
have appointed a committee to secure  
funds to erect a monument to John James  
Audobon, the naturalist, over his grave in  
Trinity cemetery, New York city.

THE ADVANCE SHEET of the premium  
list for the second annual chrysanthemum  
show of the society of Indiana flor-  
ists, has been published and may be ob-  
tained from Wm. G. Bertermann, Sec'y,  
Indianapolis.

HINTS ON CACTI.—A. Blanc & Co.,  
Philadelphia, send us a copy of a hand-  
some and liberally illustrated treatise on  
the culture of cacti with above title. All  
interested in these curious plants should  
secure a copy.

SHIPPING LABEL FOR PLANTS.—W. R.  
Shelmire, Avondale, Pa., is introducing a  
label to use on shipments of plants. It  
represents a large begonia leaf on which  
is lettered "Perishable Plants" in white,  
the leaf being printed in green. It is  
intended to correspond with the red label  
already in use on cut flower shipments.

**M. M. BAYERSDORFER & CO.**

56 N. 4th St., Philadelphia, Pa.,

Manufacturers and Importers of

**BASKETS \* AND \* FLORISTS' \* SUPPLIES.**

A large variety of Baskets for

**COMMEMORATIONS.**

Mention American Florist.

**Wholesale Markets.****Cut Flowers.**

BOSTON, April 9.	
Roses, Teas	\$2.00
" Perles, Mermets, Bennetts	4.00 @ 6.00
" Jacqs, Hybrids	12.00 @ 20.00
Carnations	1.00 @ 2.00
Violets, Pansies	.50
Tulips, Lily of the valley	10.00
Longitornum	10.00
Candium	4.00 @ 8.00
Sulphur	2.50
Adiantum	1.50

NEW YORK, April 9.	
Roses, Bon Silence	4.00
" Perles, Niphotos	4.00
" Sonys, Gontiers	4.00
" Mermets, Brides	4.00
" La France	6.00 @ 8.00
" Bennetts	5.00
" Am. Beauty, Puritans	2.00
" Jacqs	8.00
Hybrids	10.00 @ 30.00
Carnations, long stems	1.50
" short stems	1.00
Mignonette	3.00
Hyacinths, narcissus	3.00
Lily of the valley, tulips	3.00
Violets	.50
Gardenias	1.00

CHICAGO, April 11.	
Roses, Perles, Niphotos	\$2.00
" Bennetts, La France, Dukes	7.00
" Bon Silences	3.00 @ 4.00
" Mermets, Brides	6.00
" Am. Beauties	18.00
" Jacqs	12.00
Carnations, short	1.25
" long	1.50 @ 2.00
Smilax	2.00
Lily of the valley, daffodils	25.00
Roman hyacinths, tulips	5.00
Violets	3.00
Callas	10.00
Candium	6.00

PHILADELPHIA, April 11.	
Roses, Teas	\$2.00
" Perles, Niphotos, Souvs	4.00
" Bennetts, Gontiers	4.00
" Mermets, La France, Brides	8.00
" Bon Silences	3.00
" Am. Beauties, Puritans	20.00
" Cooks	10.00
" Jacqs, Nels	10.00
Carnations, short	1.00
" long	1.50
Lily of the valley	3.00
Dutch hyacinths	4.00
Harrill lilies	10.00
Callas	8.00
Smilax	20.00
Violets	.50

## WM. J. STEWART,

### Cut Flowers & Florists' Supplies

**WHOLESALE**

67 Bromfield St., BOSTON, MASS.

**CHAS. E. PENNOCK,****WHOLESALE FLORIST,**

38 So. 16th STREET,

PHILADELPHIA, PA.

Mention American Florist.

**CUT FLOWERS AT WHOLESALE****N. F. MCCARTHY & CO.****WHOLESALE FLORISTS,**

63 Bromfield St., under Hort. Hall, Boston, Mass.

We have made large contracts with the best Rose  
growers about Boston to handle their entire stock  
this season. Our stock will consist of Papa Gontier,  
Bennett, Pierre Gontier, American Beauty, Mer-  
met, La France, Malmison, Cook, Bride, Niphotos,  
Perle, Nels, Anna Webb and Grace Wilder pinks,  
long stemmed other flowers in variety. We shall have  
a particularly large lot of Mermets and Perles, so  
that in sending to us when you fail to get them else-  
where you will feel reasonably sure of getting them.  
Unknown parties must give satisfactory reference or  
't us send C. O. D. Write for information.

**\* PAPA GONTIER \***

I offer to the trade strong, healthy plants of this  
new Rose which has proved itself the most popular  
as well as the most profitable yet introduced. Send for  
plants from 2½-in. pots, \$10.00 per 100; 3½-in. \$15.00.  
All other leading varieties at market rates. Also  
Made, Guin and Waterlilies.

JOHN H. TAYLOR, Rose Grower,  
BAYSIDE, L. I., N. Y.

IMPORTER AND GROWER  
HYBRID PERPETUAL ROSES  
WILLIAM H. SPOONER,  
Jamaica Plain, Boston, Mass.

**Thos. Young, Jr., & Co.,****Wholesale Florists,**

INCORPORATED 1885,

20 W. 24th St., NEW YORK.

**W. S. ALLEN,****WHOLESALE DEALER IN CUT FLOWERS,**

36 EAST 23rd STREET, NEW YORK.

ESTABLISHED 1877.

Price list sent upon application.

## LaRoche & Stahl,

### Florists & Commission Merchants

—OF—

**CUT FLOWERS.**

1237 Chestnut Street, - PHILADELPHIA.

Consignments Solicited. Special attention paid to  
shipping. Mention AMERICAN FLORIST.**C. STRAUSS & Co.,**

TELEPHONE 977. WASHINGTON, D. C.

**WHOLESALE ROSE GROWERS**

AND DEALERS.

**LARGE STOCK OF ALL THE NEW ROSES.**

Orders booked for young stock at special rates.

**GEO. MULLER,**17 CHAPMAN PLACE, (near Parker House),  
BOSTON, MASS.**WHOLESALE AND COMMISSION DEALER IN****Fresh Cut Flowers & Florists' Supplies.**

Flowers carefully packed and shipped to all points  
in Western and Middle States.  
Orders by Telegraph, Mail, Telephone or Express  
promptly attended to.

**HAMMOND & HUNTER,**

Wholesale dealers in

**Cut Flowers and Florists' Supplies**

61 West 30th Street, NEW YORK.

**WELCH BROS.,****WHOLESALE FLORISTS.**

165 Tremont Street, BOSTON MASS.

We make a specialty of shipping choice Roses and

other Flowers, carefully packed, to all points in

Western and Middle States.

Return Telegram is sent immediately when it

is impossible to fill your order.

**KENNICOTT BROS.,****WHOLESALE \* FLORISTS.**

ALL CUT FLOWERS IN SEASON.

Write for price list. Consignments solicited.

27 Washington Street, CHICAGO.

**CUT FLOWERS**

The choicest Cut Flowers at lowest market rates  
shipped C. O. D. Telephone connection. Use A. F.  
Code when ordering by telegraph. For prices, etc.,  
Address,

J. L. DILLON, BLOOMSBURG, PA.

**M. MALSH,**

206 S. Halsted Street, CHICAGO.

WHOLESALE DEALER IN

**CUT FLOWERS,**

AND GROWERS' AGENT.

Regular shipping orders especially solicited.



## Seed Trade.

SEED TRADE ASSOCIATION.—William Meggat, president, Wethersfield, Conn.; Albert M. McCullough, secretary, Cincinnati, O.

## A Novelty for 1890!

When Mr. Julius L. Brown was in Mexico he was talking with Colonel Foster, of the Mexican army, and one of ex-president Gonzales' most intimate friends. The colonel said: "Did you ever see any of our caterpillars?" Mr. Brown replied that he had not, and asked what distinguished them. "We have a caterpillar in the State of Michoacan that supplies the missing link between the vegetable and animal world. We bury the live caterpillar in the ground. A plant springs from his body which produces red flowers. These flowers, instead of making seed, reproduce a caterpillar. Now, mark the process. We plant the animal and produce the vegetable. The vegetable flowers and in turn produces an animal. From the caterpillar comes the plant. The plant in turn reproduces from its red flowers the caterpillar." Mr. Brown insisted that the caterpillar was a joke. The colonel thereupon called a gentleman from Michoacan, whose name Mr. Brown does not recall, and without telling him the story asked him about the caterpillar of his State. He repeated the story as the colonel had told it, and asserted upon his solemn word of honor that it was true, and that he had seen the caterpillar buried and the plant produced and the caterpillar reproduced repeatedly. Mr. Brown afterward saw General Ocho, General Pombo, then president of the Mexican senate, and Mr. Francisco Blanco, a leading Mexican and partner of General Pombo, and they all told him the same story, assuring him of its truth. —Atlanta, (Ga.), Constitution.

UNUSUAL and general demands on southern representatives and senators in Congress for seeds and documents, developed the fact that the cause for such lay in the fact that mail route contractors were desirous of a big record for heavy mails to increase their pay for the coming season. Truly the government seed shop has a mission.

## NEW PLANTS.

	Per doz.
30 varieties New Fuchsias.....	\$ 1.00
30 " " Geraniums.....	1.00
30 " " Chrysanthemums.....	.50
2 Carnations " Wm. Swayne,.....	3.50
1 Anthems Coronilla " L. L. Lamborn,.....	1.00
1 Geraniums, Mad. Sallerio.....	.50
1 Heliotrope, dark, light, white.....	.50
30 varieties, best.....	.50

A. GIDDINGS, DANVILLE, ILL.

**MELON SEEDS** 14c. to 40c. per pound. Send for PRICE LIST. Odella, Black Spanish, Kolb Gem, Dark Iceing, Iron Clad, Pride of Georgia, Hackensack, Bird, Golden Gem, Banana. FREEMAN HURFF, Swedesboro, N. J.

## 20,000 VIOLETS.

In 24-inch pots. MARIE LOUISE, NEAPOLITAN, SWANLEY WHITE, at \$2.50 per hundred, or \$20.00 per thousand. BOUVARDIA DAVIDSONII 2 1/2-inch, \$2.00 per hundred. Above plants can be supplied at half rate in rooted cuttings.

JOSEPH RENARD, UNIONVILLE, Chester Co., PA.

## 10,000

## VIOLETS.

MARIE LOUISE AND SWANLEY WHITE.

Large clumps from cold frame, \$10.00 per 100.

J. L. LOOSE, Alexandria, Va.

## DOUBLE WHITE PETUNIA,

MRS. G. DAWSON COLEMAN.

Endorsed by such florists as Dreer, Henderson and Halliday, as the finest double white ever produced. Exquisite in shape, pure white in color. For floral work and bedding it has no equal. Mail, five for 75c; eight for \$1.00.

## NEW COLEUS FOR 1888.

Harry Harold and the Mikado..... 10 cents each.  
Tololent Yellow Jacket..... " " "  
Nonesuch and Purple Prince..... " " "  
John Goode, the Chicago Bear, 40c, 50c, each 10c.  
The set of seven for 60c., two of a kind \$1.00 by mail.

THOS. G. HAROLD,

KINGSTON, Somerset Co., MARYLAND

Rooted Cuttings of leading sorts Coleus, strong and clean..... per 100, \$1.25  
Rooted Cuttings, \$1 per 100 extra potted..... 75  
Swanley White Violets..... 4.00  
Vines major var., 24-in. pot..... 8.00  
Tuberose Bulbs, 4-in. circum. & over..... per 1,000, 10.00  
" sets, clean..... per bu., 4.00  
Begonia Saundersonii, 4-in. pots..... per 100, 8.00  
" Metallica..... 8.00  
" extra..... 10.00  
Heliotrope, Chieftain, best market sort..... 3.00  
Bouvardia, Davidsonii, best single white..... 3.00  
The set of seven for 60c. of general florist stock.

JOHN CURWEN, JR., Villa Nova, Pa.



## Florist's Letters.

PATENT APPLIED FOR.  
These letters are made of the best Janmottelles, wired on wood or metal frames with holes to insert topkicks.

## Prices on Wood Frames:

2 1/2 in. purple..... per 100, \$3.00  
2 1/2 in. "..... 4.00

Send for sample. Postage 10c. per 100. Script lettering on Metal Frames any word, so, per letter.

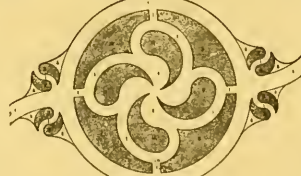
Designs, Monograms, Etc.

W. C. KRICK,

1107 Broadway, Brooklyn, N. Y.

M. M. Bayersdorfer &amp; Co., Phila. Agts. for Penna.

J. C. VAUGHAN, Chicago, Art. west of Pennsylvania.



Second Edition.

## GEO. A. SOLLY &amp; SON'S

BOOK OF PLANTS

For

Carpet and Ornamental Flower Beds. With many it is a difficult task to lay out a carpet bed, or fancy design on the lawn, and perhaps more difficult to choose the proper plants to harmonize, so as to give the best effects. The object of these drawings is to assist gardeners and amateurs, and to enable them to choose the proper plants for their work. It is expected that this book will supply a long felt want, as it is the first and only publication entirely devoted to Fancy Flower Bedding.

This, our SECOND EDITION, consists of over 100 designs, finely engraved, on good paper, nicely bound, sent prepaid to any address on receipt of Price, \$3.

GEO. A. SOLLY &amp; SON,

STIMMINGFIELD, MASS.

Mention American Florist.



## TRY DREER'S

## GARDEN SEEDS

Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free. HENRY A. DREER, Philadelphia.

## SIBLEY'S TESTED SEEDS

Catalogues sent! Containing all the latest novelties and standard varieties of garden, field and flower seeds. Gardeners everywhere should consult it before purchasing. Stocks pure and fresh, prices reasonable. Address: Hiram Sibley & Co., Rochester, N. Y., or Chicago, Ills.

THE BEST AND CHEAPEST  
DOUBLE PETUNIA SEED

(P. hybrida grandiflora fl. pl.)

in the market. For sale to the trade by the grower.

G. A. McTAVISH,

NORTH SAANICH, B. C., CANADA.



## TO THE TRADE ONLY.

My New Special Offer of

## EXTRA CHOICE FLOWER SEEDS

is published now, and may be had on application.

FRED ROEMER, SEED GROWER,

QUEDLINBURG, GERMANY.

## FLORISTS CAN MAKE MONEY

By taking subscriptions among their customers for

## GARDEN and FOREST

An Illustrated Weekly Journal of Horticulture, Landscape Art and Forestry.

Conducted by PROFESSOR C. S. SARGENT, of Harvard.

Subscriptions are readily obtained from persons who own or occupy nice residences in the country or in suburban districts. Liberal commission allowed to florists. See editorial columns of Harper's Magazine and The Century (March numbers), and of the leading papers of America for endorsement of GARDEN and FOREST.

Circulars and Show-Cards furnished on application. ADDRESS

GARDEN and FOREST PUB. CO., Lim.,

D. A. MUNRO, Mangr. Tribune Building, NEW YORK.

HAMMOND'S "SLUG SHOT",  
GRAPE DUST, &c.

IN LOTS TO SUIT THE TRADE.

J. C. VAUGHAN, Chicago. PLANT SEED CO., St. Louis. J. M. McCULLOUGH'S SONS, Cincinnati.

J. A. SIMMERS, Toronto, Ont. J. R. &amp; A. MURDOCH, Pittsburg. A. W. LIVINGSTON'S SONS, Columbus, O.

And by Eastern Wholesale Seedsmen.

## PLANET JR.

GARDEN DRILLS.

WHEEL HOES.

HORSE HOES. FIRE FLY.

Each one of these

POPULAR TOOLS

has been either

REMODELED

OR IMPROVED.

They are more com-

plete, simple, practical

and strong

than you can imagine;

so look them

over carefully.

NEW STYLES. NEW PRICES.

S. L. ALLEN &amp; CO., Patentee &amp; Mfrs., 127-129 Catherine St., Philadelphia, Pa.



## FORCING BULBS

FOR

Fall Delivery.

## NARCISSUS

AND OTHER

FORCING BULBS

For Fall Delivery

All Good Flowering Bulbs.

OF NARCISSUS I SHALL HAVE ABOUT  
TWO MILLIONS READY FOR  
FALL DELIVERY.

Narcissus Albicans, the best of the single white  
trumpets, 45¢ per 100.

Narcissus Bicolor Emrys, the queen of the bi-  
color daffodils, enormous flowers, 90¢ per 100.

Narcissus Bicolor Grandis, similar in color to  
Horsfieldi, but having larger flowers and  
blooming later, 65¢ per 100.

Narcissus Bicolor Horsfieldi, one of the largest  
and best for cutting, 65¢ per 100.

Narcissus Bulbocodium, the Hoop Petticoat daf-  
fodil; very fine, strong bulbs; 65¢ per 100;  
50¢ per 1000.

Narcissus Bulbocodium Citrinus, like the yellow  
Hoop Petticoat, but with pale sulphur-yellow  
flowers, 75¢ per 100; 65¢ per 1000.

Narcissus Golden Spur, very large deep yellow  
flowers and early blooming; one of the best;  
45¢ per 100.

Narcissus Henry Irving, one of the best deep  
golden yellow trumpets, 60¢ per 100.

Narcissus Incomparabilis Cynosure, a beautiful  
single Incomparabilis for cutting, yellow cup,  
divisions creamy white, 85¢ per 100; 70¢ per  
1000.

Narcissus Incomparabilis Stella, large single  
white variety, very early, fine for cutting;  
85¢ per 100; 70¢ per 1000.

Narcissus Major, true, one of the best forcing  
sorts, large yellow trumpet, similar to maxi-  
mus, 90¢ per 100; 80¢ per 1000.

Narcissus Nobilis, a first-class variety for florists,  
free and early, 75¢ per 100; 60¢ per 1000.

Narcissus Obvallaris, the true Tenley daffodil, one  
of the best varieties, forcing deep rich yellow  
flowers of great substance, 85¢ per 100; 70¢ per  
1000.

Narcissus Olorus Campenelle, the well-known  
Campenelle jonquil, very strong bulbs, 55¢  
per 100; 45¢ per 1000.

Narcissus Orange Phoenix, large double white  
flowers with orange center, good for cutting,  
95¢ per 100; 80¢ per 1000.

Narcissus Pallidus Præcox, the earliest of all;  
forces very freely; single sulphur-colored  
trumpets, 75¢ per 100; 60¢ per 1000.

Narcissus Poeticus Ornatus, the early white poet's  
Narcissus, the best of the Poeticus section for  
forcing and for cutting, 85¢ per 100; 70¢ per  
1000.

Narcissus Poeticus Plenus, the double white Nar-  
cissus, 45¢ per 100; 30¢ per 1000.

Narcissus Princeps, one of the best forcing sorts;  
soft pale yellow trumpets, 95¢ per 100; 80¢ per  
1000.

Narcissus Rugilobus, true, large yellow trumpet,  
very free and very early, 145¢ per 100; 120¢ per  
1000.

Narcissus Scoticus, the Scotch Garland daffodil,  
a beautiful variety both for borders and for  
forcing, 65¢ per 100; 40¢ per 1000.

Narcissus Von Sion, true, the double deep yellow  
daffodil, 55¢ per 100; 40¢ per 1000.

And many other first-class sorts. List of  
varieties and price I should be happy to fur-  
nish on application.

Anemone Fulgens, true, fine strong English grown  
tubers, 75¢ per 100; 60¢ per 1000.

Chionodoxa Lucilia, true, beautiful blue flowers in  
early spring, 25¢ per 100; 20¢ per 1000.

Freesia Refracta Alba, one of the best modern  
plants for forcing, pure white, sweetly scented  
flowers, 75¢ per 100; 65¢ per 1000.

THOS. S. WARE,

HALE FARM NURSERIES,

Tottenham, London, England.

## Ed. JANSEN,

MANUFACTURER \*

— OF —



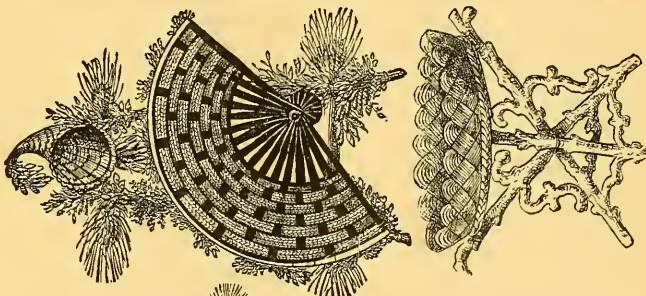
NOVELTIES IN BASKETS

— FOR —

FLORISTS,

124 West 19th St., NEW YORK.

SPRING STOCK NOW READY.



CHAS. W. REIMERS

MANUFACTURER OF

FLORIST BASKETS.

Send for Terms and Catalogue.

329 Fourth St., - LOUISVILLE, KY.



Mention the American Florist.



**WANTED** Every florist to try the  
new yellow Carnation  
Starlight. See advertisement in another column  
and send for price list of this and other new and  
standard vars. to Geo. Hancock, Grand Haven, Mich.

## 10,000 IRISH JUNIPER

From 8-inch to 18-inch for sale cheap to quit the  
business. Samples and prices on application.  
ADDRESS

THOS. A. McBETH, Springfield, O.

Mention American Florist.

## STORM KING FUCHSIAS.

I offer a fine stock of

	Per 100
Storm King, 3-in., well branched, \$1.25 per doz.	\$10.00
Storm King Fuchsias, 2-inch.	5.00
Euphorbia Jacquiniana, 2-inch.	5.00
Roses - Perle des Jardins, 2-inch.	4.00
Centaurea Gymnocarpa.	5.00

JOSEPH E. BONSALL, 303 Garfield Ave., Salem, O.

## PAPER SEED BAGS,

For Flower and Vegetable Seeds

CLARK BROTHERS, Manufacturer, 61 Ann St., N. Y.



## Baltimore.

Wednesday evening, March 7, the last regular meeting of the Baltimore Florist Club, was also the first anniversary of its organization. The anniversary exercises were of an intellectual instead of convivial character, much of the intellectual repast being furnished by Mr. Ekas, who read an excellent paper on smilax, describing its culture as practiced at the establishment of the late John E. Feast, where Mr. Ekas has for some years been foreman. Many of their plants are from six to twelve years old, producing strings eight feet long. Early in May the beds are mulched with straw, and no benches are allowed over the beds during summer unless drip can be avoided. In August the beds are cleaned off, etc., strings are run up and about one inch of manure spread between the rows, after which sufficient moisture is given to moisten the soil for about six inches below the surface. Mr. Ekas states that to avoid disturbing the roots, the beds are not forked over, as is frequently done. When the plants are fully started a thorough soaking of water is given and a liberal use of the syringe is practiced daily until the plants have grown about two feet, when it is gradually stopped and plenty of air given. The strings should be cut about six inches from the ground, and instead of twisting the shoots round the string, it is recommended to tie them up with soft cotton. Above points are quoted from memory.

Mr. McRoberts, of Breckenridge & Co., is quite enthusiastic over the New York orchid show. His fine specimen of *Lycaste S. alba* was sold to Sanders of England and brought a good price. Mack says he will go again. Mr. McRoberts has shown considerable enterprise in his management of the Rosebank greenhouses and fully merits the success with which he is meeting. A. W. M.



## WE ARE NOW BOOKING ORDERS FOR HYACINTHS, TULIPS, Single and Double NARCISSUS, Etc. SEEDSMEN AND FLORISTS

Importing direct should write us for prices. Special rates to large buyers. Largest stock of

*Hyacinths, Tulips, Polyanthus, Single and Double Narcissus, Narcissus Bicolor*  
*Horsfieldi, Poets Ornatus, Trumpet Major, Double Von Sion.*



**R. VAN DER SCHOOT & SON,**  
Bulb Growers.

HILLEGOM, near Haarlem, HOLLAND

## FOR SALE.

Ten Iloes and Carnations, 24-in. pots, per 100, \$4.00  
Rooted Cuttings of Coleus and Carnations to order,  
\$2.00 per 100.

*Dracena Indivisa*, \$1.50 to \$2.50 per dozen  
**W. W. GREENE, SON & SAYLES,**  
WATERTOWN, N. Y.

## GLADIOLUS \* \* TUBEROSES

ORNAMENTAL NURSERY STOCK.

**SAMUEL C. MOON,**

Wholesale Nurseryman and Gladioli Grower,  
MORRISVILLE, Bucks Co., PA.

Dahlias, ground roots... per doz \$1.50; per 100 \$12.00  
Ponies ..... per 100 \$5.00; per 1,000, 45.00  
Climbing Roses in var. .... per 100, 8.00  
Hardy Roses in var. .... per doz, 25.00  
Clematis ..... per doz, 25.00  
Choice 2-year old grape vines: Niagara, Worden  
Jefferson, L. Washington, Naomi, Prentice, Rock  
Lington, Vezzenes, Brighton, Moore's Early, etc.,  
\$2.00 per ten. 1-year old vines, one-half price.  
Hardy Clematis Bella Vitellia, etc., \$1.00 per doz;  
\$5.00 per hundred.

**F. A. BALLER, Bloomington, Ill.**

## CHRYSANthemUMS.

I have a fine collection for florists' use, and  
can sell them my selection at \$5.00 per 100;  
\$25.00 per 1000.  
Send for Wholesale Price List.

**W. W. COLES,**  
LANSLOWNE, PA.

## \* CHRYSANthemUMS \*

Send for Catalogue of over 100 varieties, including  
many newer kinds. \$3.00 per 100.

**H. L. PHELPS, Springfield, Ill.**

## ROYAL PALM NURSERIES.

Fresh seeds of Sabal Palmetto to the trade  
only, 6c. \$1.40 per lb. (14 by mail and 10c. for postage.)  
Pandanus Ulis (Screw Pine), \$1.00 per lb. Both  
of above in 20 lbs. by express or f. r. for \$27.00 and  
\$25.00 respectively. Address at once.

**REASONER BROS., Mankato, Minn.**

## IMPORT BULB PRICES.

We are Large Dealers in all

## FORCING BULBS.

And ask the opportunity to make  
prices on your list.

Please write us for Estimates now.

**J. C. VAUGHAN,** <sup>80X</sup><sub>688</sub> **CHICAGO.**

## DREER'S WHOLESALE LIST —OF— PLANTS. SEEDS. BULBS.

AND EVERYTHING FOR FLORISTS,  
Now ready for April, May and June. If you have  
not received it drop us a postal card. We have  
Stock in good condition for immediate sales, on  
which a large profit can be realized.

**HENRY A. DREER,**

714 CHESTNUT ST., PHILADELPHIA.

10,000

## ECHEVERIAS SECUNDA GLAUCA

Per hundred, \$3.00.

**CHARLES HEINZ, SHARON, PA.**

## WHITE

## WATER LILY ROOTS

(*Nymphaea odorata*.)

\$5.00 per 100. The Trade Supplied.

**WM. F. HALSBY,**  
WATER MILLS, LONG ISLAND, N. Y.

## WATER LILIES.

All Colors. Also

## CAPE COD PINK POND LILIES,

\* HARDY. \*

Send for Catalogue.

**BENJ. GREY, MALDEN, MASS.**

## Cape Cod Pink Pond Lily

For price list, Plants and Cut Flowers,  
address the original cultivators.

**CHIPMAN BROS.,**

Sandwich, (Cape Cod,) Mass.

## ROFFEA

(FOR TYING)

IN ANY QUANTITY.

BY THE POUND, BALE OR TON.

**M. B. FAXON,**

—SEEDSMAN—

21 South Market Street, BOSTON, MASS.

SEND FOR NEED CATALOGUE.

Mention American Florist.

## TO THE TRADE.

Roses—Princess Beatrice, 24-in. .... per doz. \$2.50  
" Mermata, Souv. d'un Ami, Perles, Ni-  
phetos, Queen's Scarlet, etc., 34-in. .... \$ 3.00  
" J. P., good var. and fine plants, 34-in. .... 10.00  
Carnations—Snowdon, Hinz's White, Century. 3.00  
new and rare, 12 var. .... \$5.00 to 8.00  
Chrysanthemums—40 fine var., 24-in. .... 3.00  
" Mrs. Langtry, Phoebe, etc.,  
cut last year. .... per doz. \$2.00 10.00  
Heliotrope, 3 varieties. .... 4.00  
Double Petunias, the best varieties. .... 4.00  
Lemon Verbena. .... 5.00  
Pine Verbena, all in bud. .... 3.00  
" somewhat smaller. .... 2.40  
Ivy Geraniums, best var., 3-inch. .... 5.00  
Smilax, 3-inch. .... 4.00  
Fuchsia, good var., 2-inch. .... 3.00  
A few sets of Henderson's New Mauve  
Verbenas. .... per set \$1.50

**BROWN & CANFIELD.**

527 WALNUT ST., SPRINGFIELD, ILL.

Mention American Florist.

**AUGUST RÖLKER & SONS,**  
44 Dey St., NEW YORK,  
Supply the Trade with  
**SEEDS, BULBS,**  
And all kinds of  
**FLORISTS' SUPPLIES.**

1888 Trade List for Seeds now ready.

**BULBS, IMMORTELLES,**  
**J. A. DE VEER,**  
(Formerly of DeVeer & Boomkamp.)  
19 Broadway, New York.

SOLE AGENT FOR  
THE GENERAL BULB CO., Vogelenzang, (Holland.)  
Ls. BREMOND FILS, Orléans, (France.)

Offers to the trade, net without engagement, for prompt or Spring delivery. Per 100, Per 1000

Lilium Auratum, large bulbs.....	\$9.00	\$90.00
Excelsior Pearl Tuberoses, extra.....	1.75	15.00
"    First size.....	1.50	12.00
Gladioli, large bulbs, fine mixed.....	1.50	12.00
"    Brencheyensis.....	.40	4.00
"    scarlet & crimson.....	1.00	9.00
"    pink & variegated.....	1.75	15.00
"    white and light.....	2.25	20.00
"    yellow and yellow.....	2.50	22.50
Hyacinthus Candicans, large.....	2.50	20.00
Dahlias in the sorts, undivided roots.....	per 100 per doz.	2.25
"    in separate colors.....	12.00	1.75
"    in fine mixture.....	9.00	1.25
Cannas.....	5.00	.75
Caladium Esculentum, large bulbs.....	12.00	1.75
"    good sized bulbs.....	7.00	1.00

**CLEMATIS JACKMANI** and other sorts, Dutch grown, 2 to 3 years old, strong roots..... 35.00 4.50

QUOTATIONS ON ROMANS.  
PAPER WHITE NARCISSUS.  
LILIAM CANDIDUM, ETC.  
NEW CROP, GIVEN ON APPLICATION.  
Will Remove May 1st to 183 Water St.

✽**TUBEROSE BULBS**✽  
We are the largest growers in the country, and offer the best quality  
PEARL TUBEROSES..... per 1000, \$20.00  
DOUBLE "..... 20.00  
\$2.50 per 100 in small lots.  
Trade List made free.  
HENRY A. DREER, Philadelphia.

**A SPECIALTY.**  
**SEEDS FOR FLORISTS**  
CAREFULLY SELECTED.  
And from which the best results may be expected.

ASTER, New Pearl, pure white.....	PKT.	\$ .25
"    bright rose.....	25	
"    Boston Florist's, pure white.....	10	
"    "    fine rose.....	10	
"    Zirngiebel's, white.....	10	
BALSAM, Snow Ball, finest double white.....	15	
PANSY, Improved Giant, best strain in cultivation.....	50	
STOCKS, Boston Florist's Double white, superior to, and producing a larger percent. of double flowers than any known strain.....	15	
STOCKS, Crimson King, finest double crimson.....	25	

Our strains of *Chieriaras*, *Cyclamen*, *Calceolarias*, *Primulas*, *Mimulus*, *Verbenas*, and *Zinnias* are of very superior selected strains.  
EXCELSIOR PEARL TUBEROSES, \$1.50 per hundred, \$15.00 per thousand.

Wholesale price 1st for florists now ready. Send one.

**SCHLEGEL & FOTTLER,**  
26 S. Market St., BOSTON, MASS.  
Mention American Florist.

**Florida Crown Bulbs.**  
TUBEROSE, No. 1 and Tall Double..... Per 1000 \$10.00  
**A. H. CRANE,**  
NASHUA, FLA.

OUR WHOLESALE CATALOGUE

— OF —

**BULBS**

Of all Sorts,  
**CHRYSTANTHEMUMS, &c.**

Is now ready. Will be sent to all applying that we know to be engaged in the trade—or to any furnishing us evidence, as cards, letter-heads or bill-heads.

**V. M. HALLOCK & SON,**  
**QUEENS, NEW YORK.**

**F. E. McALLISTER,**

—WHOLESALE DEALER IN—

Seeds For the Florist Requisites Bulbs For the Green-  
Market, Garden- house or Gar-  
and Farmer. pers, Pampas den.  
Flumes, etc.

22 Dey Street, - - - NEW YORK.

**SEGERS BROTHERS,**  
GROWERS OF  
**HOLLAND BULBS.**  
OUR SPECIALTIES ARE.

Holland Hyacinths and Tulips, in any quantity; also Crocuses, Narcissus, Daffodils, Liliums, Lily of the Valley, Gladiolus The Bride, Anemones, Ranunculus, Spiræa Japonica, etc.

References as to quality of our Bulbs, etc., to several United States Florists and Seedsmen.

Send for Wholesale Catalogue.

**LISSE. NEAR HAARLEM, HOLLAND.**  
WHOLESALE ONLY. NO AGENTS.

**SEEDS, BULBS, PLANTS,**  
SUPERIOR NORTHERN GROWN.  
**CURRIE BROS., SEEDSMEN AND FLORISTS,**  
Send for Catalogue. **MILWAUKEE, WIS.**

**RELIABLE SEEDS FOR FLORISTS.**  
**ZIRNGIEBEL'S** Improved White Aster.  
—Improved White Perpetual Stock.  
—Improved Giant Candytuft.  
—Improved Giant Tricolors and Bugnot Fancy Pansies.  
Trade packages of any of the above seeds, \$1.00 each.  
**DENYS ZIRNGIEBEL, Needham, Mass.**

**DUTCH BULBS.**  
**JOHN BARTH. BOS,**  
OVERVEEN, near Haarlem, HOLLAND,  
LARGEST GROWER OF  
**HYACINTHS, TULIPS, NARCISSUS, LILIES**  
and all sorts of forcing bulbs.  
Catalogue FREE on application.



**EVERGREENS**  
Both native and nursery grown.  
Forest Trees and Tree Seeds.  
Immense quantity, lowest prices.  
Wholesale list, describing all leading varieties, free. It will pay you to send for it. **UECKE BROS., Seymour, Wis.**

**E. M. KRELAGE & SON,**  
**HAARLEM, HOLLAND.**

Largest collections and stocks of Bulbs of all kinds: Hyacinths, Tulips, Crocus, Narcissus, Fritillaria, Anemones, Ranunculus, Liliums, Gladiolus, Iris, Amaryllis, Peonia, Ixia, and miscellaneous articles in greatest variety. Clivia, Tritoma, Muscari, Scilla, Lily of the Valley, Spiræa (Houtteia), Dieleytra, etc. Largest collection of strawberries. Novelties in the Bulb line.

Wholesale catalogue is sent on application and as long as not published special offers will be given if sorts and quantities required are stated.

E. H. KRELAGE & SON are now booking orders for Roman Hyacinths, Double Roman and Totus Albus Narcissus, Jonquils and other southern articles. Special prices on application.

**NO AGENTS.**

Mention American Florist.

**TO EXCHANGE.**

**Verbenas**—Rooted Cuttings or pot plants for small Roses. See adv. in another column.

**WM. DESMOND,**  
KEWANEE, ILL.















Chicago.

There is a large supply of flowers in the market. Prices were not advanced at Easter, as much as usual, and since that time wholesale prices have been weakening under the heavy stock coming in. Retail prices are now as follows: Perles, Niphetos, \$1 to \$1.50 a dozen; Bon Silenes, 75 cents to \$1; Mermets, La France, Bennetts, \$2; tulips, daffodils, lily of the valley, \$1; candidums, \$2.

The Forest Glen Floral Co. have opened another branch store on West Madison street, near Ashland avenue.

J. T. Anthony arranged an elaborate decoration of tropical plants for a church wedding the 3d inst. But few flowers were used, and those were loosely arranged in vases. The effect was very rich.

James Farrell, a well-known retail florist, has sold out to George Burke, who has been Mr. Farrell's chief assistant for several years. Mr. Farrell, whose health has been poor, will spend a year abroad.

## FLOWER SEEDS.

SOW NOW

For Propagating and Cutting during the Summer.

ASTER SEEDS. CROP 1887.

TRUFFAUTS PRIZE STRAIN.	Pkt. oz.
Pure white.....	\$ 50 83.00
Bright pink.....	50 3.50
Brilliant scarlet.....	50 3.50
Blue.....	50 3.50
Violet and purple.....	50 3.50
Mixed, all colors.....	50 3.00
BALSAM PERFECTION, pure white, ext. dbl.	50 2.00

For a complete list see Breer's April list of Seeds and Plants for the trade. Mailed FREE.

HENRY A. DEER,

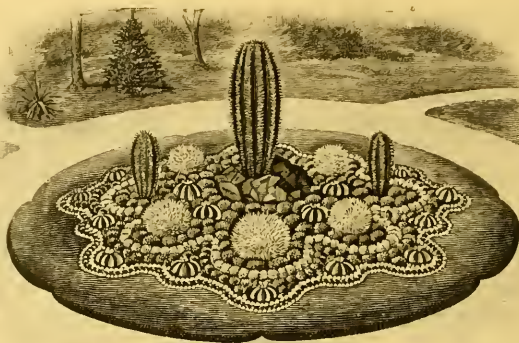
714 Chestnut Street, PHILADELPHIA.

We have Fine Plants of the following Roses:

(Per 100)

Malmation, Hermosa, La France, Mad. Alex.	3.00
Bernaix and Sombreuil	3.00
Mermet, Bon Silene, Safrano and 9 other good varieties.....	1.00
Geraniums, in 20 varieties.....	3.50
Rose Geraniums and Schrybland Pet.....	3.50
Heliopse, 4 best varieties.....	2.50
Fuchsias and Lantanas.....	3.00
Ivy Geraniums, 4 varieties.....	1.00
Carnations, Sunrise, De Graaf, Petunia and Hybrid.....	2.00
Alternantheras and Ageratum in var.....	3.00
Honey suckles, Italian.....	3.50
Coleus, Golden Bedder and Verschaffelt.....	3.00
10 market sorts.....	2.00
Begonias, Rubra, R. Alba and Sandersoni.....	3.00
Coleus Scandens.....	1.00
Vincas.....	3.00

Address GEO. THOMPSON &amp; SON, Louisville, Ky.



## CACTI FOR BEDDING.

Cheaper than ordinary Bedding Plants, and will produce an immediate effect. PRICES, \$3.00 PER HUNDRED AND UPWARDS.

FOR ONE DOLLAR. We will mail you a box containing samples of 10 VARIETIES, suitable for bedding; also wholesale price list and Hints on Cacti.

Hints on Cacti is an interesting little work and retail Catalogue, illustrated with 120 engravings of these popular plants, mailed on receipt of 10 cents.

A. BLANC &amp; CO., Philadelphia.

Important.—Mention "Bedding Cacti" when ordering from this ad.

## SPRING PLANTING.

## FRUIT AND ORNAMENTAL TREES.

MOUNT HOPE NURSERIES, ROCHESTER, N. Y.

These nurseries, established nearly half a century ago, and still under the same management, offer for Spring planting, the largest, most complete, and carefully cultivated collections in the U. S. of—

**FRUIT TREES**, Standard and Dwarf. **GRAPES**, All the best new and old sorts, embracing the **New Grape "MILLS."**

**SMALL FRUITS**, All the best, including the famous new Gooseberry, "Industry."

**ORNAMENTAL TREES, SHRUBS and EVERGREENS.**

**ROSES**, of every class, the finest in cultivation.

Send for our **NEW CATALOGUES** as follows: No. 1, Fruits, 48 pp., 10c.; No. 2, Ornamental Trees, etc., illustrated, 136 pp., 10c.; No. 3, Strawberries: No. 4, Wholesale; No. 5, Roses, 28 pp., free.

## ELLWANGER & BARRY.

Mention American Florist.

### FOR SALE.

HELLEBORE, SULPHUR, TOBACCO DUST, ETC., ETC.

In quantities to suit.

CHAS. W. JACOB, New York.

### FOR SALE.

A small surplus of Coleus—mostly Golden Bedder and Verschaffelt; strong stock plants in 3-inch pots. Price, \$3.00 per hundred.

G. W. McCLUER, Champaign, Ill.

## CAMELLIAS. AGAVES. AZALEAS.

A few choice Camellias, Agaves, etc., selected from the famous collection of HON. MARSHALL P. WILDER, are now offered for sale to close the stock.

Address

EDW. B. WILDER,

99 Washington Street, DORCHESTER, MASS.

## SPRING SALES OF BEDDING PLANTS, ETC.,

## AT AUCTION

Every Wednesday and Saturday at 10 a. m. beginning May 2 and ending June 16, 1888.

Any one wishing to consign plants to our sales can send by freight and notify us. We will take proper care of them. **RATES OF COMMISSION** 12½ per cent. for selling and three per cent. for advertising. References, any of the Florists about Boston.

We shall have from 1,000 to 2,000 **SNOWDON** and **ANNA WEBB** Carnation plants in first-class condition at every sale held during the Spring. Persons attending our sales can feel assured of finding a full line of everything the market affords in the line of bedding plants.

**N. F. MCCARTHY & CO., Auctioneers.**

Address of Auction Room in the next issue of the Florist.

63 Bromfield St. BOSTON, MASS.





## Preserving Lumber.

The article on "Preserving Lumber" in a recent number of the FLORIST suggests a few thoughts which may be useful to some in the trade.

A method of preserving the wood used in the construction of greenhouses, to be generally useful, must be something which anyone can avail himself of, using materials everywhere obtainable at moderate cost, and requiring no costly apparatus to apply. If used for plant benches it must be innocuous to the plants.

My experience leads me to the conclusion that lime and sulphate of iron (green coppers) are best adapted for this use. I have a tank in which I soak all plant stakes, labels, and small boxes used in plant culture, in a saturated solution of lime. I have used the sulphate of iron on my greenhouse benches by sprinkling them when empty with a solution, two pounds to a gallon of water, applied with a watering-pot. It destroys all fungus growth and preserves the wood. By boring a hole slanting downward near the bottom of a post and filling with coppers—plugging up the hole—the moisture in the wood will dissolve it, and it will impregnate the wood upward and downward. There is nothing in either iron or sulphuric acid which will injure plant growth if used moderately. I watered a carnation growing in a pot, with quite a strong solution of sulphate of iron, with no injurious effect.

No doubt slate and iron make the most durable bench that can be made, but these materials are not to be had everywhere, and special mechanics must be employed to put them together. Wood is everywhere to be obtained, and almost every florist is mechanic enough to build his own benches. Sulphate of iron is cheap, and its use as indicated will, I think, solve the problem of preserving lumber in damp places and be cheaper than slate. S. F.

## Philadelphia Immortelle Design Co.,

904 Filbert St., Philadelphia, Pa.

FOR DESIGNS, WHEAT SHEAVES,  
Immortelle Letters and Baskets,

SEND TRIAL ORDER.



## GOLDMAN'S ATOMIZER AND SPRINKLER

FOR A THOUSAND AND ONE USES.



For Flowers, Window Gardening, House Plants, Destroying Insects, and for various fine sprays. Most natural substitute for fog or dew. By dipping in water while closed, fills instantly. Bull thistle perforated, spray controlled by pressure of hand. Size of lemon squeezer. Weight, 6 oz. Exclusive Territory to Agents. Sells on its own merits; no talk. Sample by mail, 50 cts. This is the Atomizer that sold so well at the Panbury, Albany and other fairs. Florists and Seedsmen show it to your customers; sells fast; good profit. Excellent for indoor plants. Send for illustrated pamphlet and price to the trade. Mention this paper.

M. GOLDMUN, Manufacturer, Pittsfield, Mass.

FOR THE TRADE.  
FLORAL WIRE DESIGNS.

JAS. GRIFFITH,

THE "PIONEER" MANUFACTURER "IN THE WEST,"

305 Main Street, CINCINNATI, OHIO.

SEND FOR WHOLESALE PRICE LIST.



ESTABLISHED 1853.

— THE —

## O. K. STEAM GENERATOR

Is especially adapted to warming

GREENHOUSES, GRAPERIES  
AND CONSERVATORIES.

Special features insure

Economy, Simplicity, Durability,

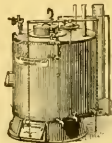
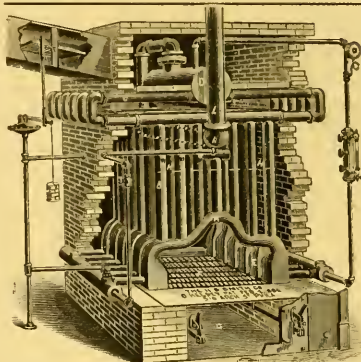
Giving best results with least labor and fuel.

SEND FOR DESCRIPTION.

THE H. B. SMITH CO.,

510 Arch Street, PHILADELPHIA, PA.

Mention American Florist.

Reduce your Coal Bills  
THE FURMAN STEAM HEATERESPECIALLY ADAPTED FOR  
WARMING GREENHOUSES.

Gives a most uniform heat night and day. Can be run with less attention, and a SAVING of fuel over any other method. Burns HARD or SOFT COAL. Endorsed by leading florists. Send for full illustrated Catalogue, Address HERENDEN MANUFACTURING CO., CENEVA, N. Y.

THE CELEBRATED  
WILKS WATER HEATER

For Heating

GREENHOUSES,

DWELLINGS,

POULTRY HOUSES,

STORES, BATH TUBS,

ETC., ETC.

Send for Price List.

S. Wilks Mfg. Co.,

Cor. Monroe &amp; Clinton Sts., Chicago



ONLY POTTERY MAKING A SPECIALTY OF

## FLOWER POTS

FOR FLORISTS.

THE WHILLDIN POTTERY CO.,

713 &amp; 715 WHARTON ST.,

PHILADELPHIA.

## SASH BARS

VENTILATORS, RIDGES, GUTTERING  
AND LUMBER.

NO WIDE-AWAKE FLORIST need be told  
it will pay him to use Sash Bars, etc. made from

— CLEAR CYPRESS. —

Bars all Shapes up to 20 feet long.

Send for circulars and estimates.

LOCKLAND LUMBER CO.,

LOCKLAND, HAMILTON CO., OHIO.

## SYRACUSE POTTERY.

Thumbs....\$2.50 Special 3-in. 4.61 4-inch..... 7.91  
2 1/2-inches..... 3.88 5-inch..... 4.75 4 1/2-inches..... 10.83  
2 3/4-inches..... 3.87 3 1/2-inches..... 8.29 5-inch..... 13.75

Above prices per 1,000, delivered free on cars. We ship all over the U. S. Free samples with first order. Order a trial crate. If you send check add 10c. exchange. Send for frt. rates and list of prices at which we pack to order assorted sizes in a crate, and for list of 17 ready packed crates. Notice that we sell at the above prices only in

## READY PACKED CRATES

Shipped at buyer's risk and freight; cash with order.

PRICES BY THE CRATE: 3,150 Thumbs, \$8.00;  
2,650 2 1/2-inches, \$ 5.00; 1,000 4-inches, \$ 4.75;  
1,875 2 3/4-inches, 7.25; 300 4 1/2-inches, 3.90;  
1,500 special 3-in., 6.00; 320 5-inches, 4.40;  
1,150 5-inches, 5.50; 100 6-inches, 5.50;  
875 3 1/2-inches, 5.50; 1,500 No. 3 Rose, 7.00.

J. N. PERKINS, Manager, Syracuse, N. Y.

## D. C. SCHOFIELD,

— MANUFACTURER OF —

Improved Greenhouse

## FLOWER POTS

NEW BRIGHTON, PA..

Offers to the Trade the BEST

Quality of Improved Shoulder Pot  
in the market at the

LOWEST PRICES EVER OFFERED.

SEND FOR PRICE LIST.

Orders will receive prompt and careful attention and satisfaction is warranted in every respect.

## HAND TURNED EARTHEN WARE

Price List for 1888.

2 1/2-inches.... per 100, \$ 5.50 8-inches.... per 100, \$ 5.50  
3 1/2-inches.... " " 10 " " 6.75  
4-inches.... " " 10 " " 8.00  
5-inches.... " " 10 " " 23.50  
6-inches.... " " 10 " " 30.00  
7-inches.... " " 10 " " 100.00

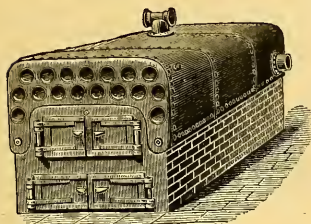
No charges for package or cartage. Send \$1.00 for sample barrel before purchasing elsewhere. All florists will find it to their advantage to do so, as we make the best and strongest ware in the market. Terms cash. Address all communications to HILLFINGER BROS., Port Edward, N. Y.

ESTABLISHED 1854.

**Devine's Boiler Works**

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers.



Capacity from 350 to 10,000 feet of four-inch pipe.  
Send for New List.

**PETER DEVINE,**

387 S. CANAL ST.,

CHICAGO.

ESTABLISHED, 1866.

**Floral Wire Designs,**

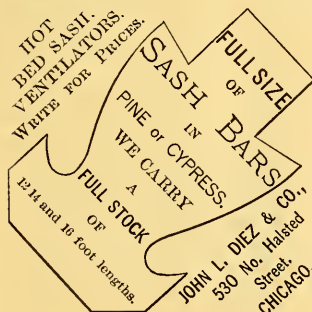
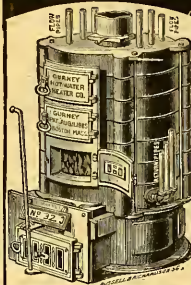
Manufactured by

**N. STEFFENS,**

335 East 21st Street, - NEW YORK.

**Conservatories****GREENHOUSES, ETC.**Erected in any part of the U. S. or Canada  
Glazed on the**Helliwell Pat. Imperishable System****OR WITH PUTTY.**For further testimonials, illustrated catalogue or  
estimates address**JOSEPHUS PLENTY.****HOFTICULTURAL AND SKYLIGHT WORKS.**

Offices, 144 Pearl Street, NEW YORK.

**GURNEY HOT WATER HEATER**

FOR HEATING  
Private Dwellings, Public Buildings,  
Offices, Conservatories, Etc.

— BY —  
**HOT WATER CIRCULATION.**

THE GURNEY HEATER is the best, most economical  
and durable. Seven sizes. Quickly set up; requires  
no brick-work; does not corrode or rust out.

Saves, 25 per cent. in Fuel.

Noiseless in Operation.

No Danger of Explosion.

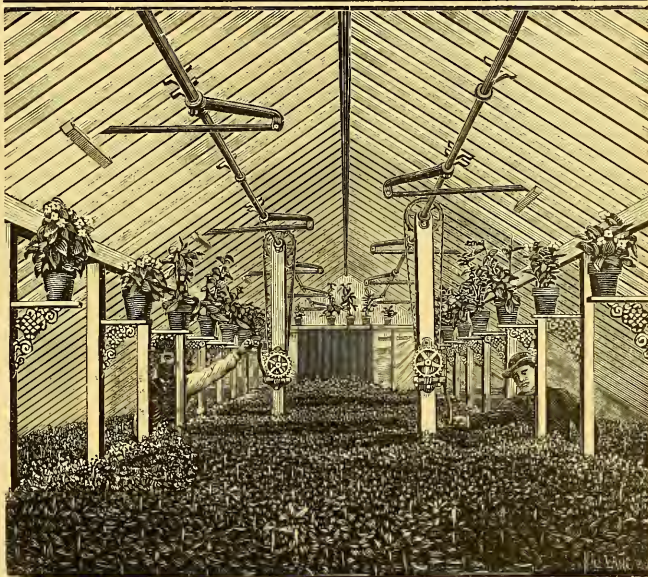
Even Temperature.

Our new INSTRUCTION BOOK will be sent gratis to  
any address, also to ARCHITECTS and FITTERS upon ap-  
plication. Also price list.

**GURNEY HOT WATER HEATER CO., 237 Franklin St., BOSTON.**

WORKS AT EAST BOSTON, MASS.

SELLING AGENCIES—M. H. Johnson, 140 Centre St., N. Y.; Rice  
& Whitacre Mfg. Co., 42 and 44 W. Monroe St., Chicago, Ill.; T. R. Chase, 31  
Edmund Place, Detroit, Mich.; William Gardiner & Co., Portland, Oregon;  
J. L. Frisbie, 526 Phila. St., Covington, Ky. It pays to do work early.

**CHAMPION VENTILATING MACHINE****And the Electric Steam Call Bell.**

Cheapest, Strongest and most favorable in use. Write for prices and circular.

**E. HIPPAUD, Mfr.,**

YOUNGSTOWN, O.

**PIPE AND FITTINGS FURNISHED**

— TO —

**PLANS AND SPECIFICATIONS.**

Contracts solicited for

**HEATING GREENHOUSES.**

Most improved plans.

**ALL WORK GUARANTEED.**

Prices furnished on application.

**E. A. STIMSON & CO.,**

No. 22 and 24 Sears Street,

**DAYTON, OHIO.**

Delegates to the next  
convention will travel  
via the

**Pullman Car Line****MONON ROUTE**

Chicago and New Albany, Indiana

TO AND FROM  
Louisville, Indianapolis, Cin-  
cinnati and the winter re-  
sorts of Florida and the  
South. For full information  
address

**E. O. McCormick, Gen. Passenger Ag't, Chicago.**

\* \* \* **BARBED** \* \* \*  
**GLAZIER \* POINTS.**

— \* \* —  
**FOR SALE IN**

BOSTON, MASS. . . by Wm. J. STEWART,

67 Bromfield Street.

PROVIDENCE, R. I. . . . .

CHICAGO, ILL. . . . . J. C. VAUGHAN,

146 W. Washington Street.

Retail at 50c. per 1,000. 5,000 will be sent by Ex-  
press free on receipt of \$2.50. PLYERS, 50c. Each.

**B. B. CHANDLER,**

Patentee and Manufacturer,

**HYDE PARK, MASS., U. S. A.**



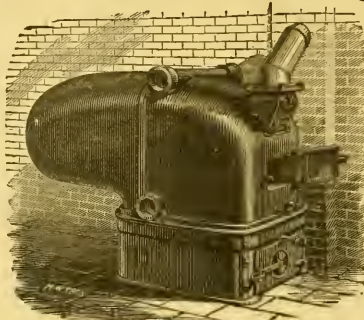
## Index to Advertisers.

Advertising Rates, etc.	405
Allen, C. E.	405
Allen, S. I. & Co.	405
Allen, W. S.	405
Baile, F. A.	408
Bayersdorfer, M. M. & Co.	405
Berger, H. H. & Co.	413
Blanc, A.	414
Bloch, Wm. A.	413
Bonsall, Jos. E.	407
Boss, Jno. Barth.	405
Boysen, Jas. L.	403
Brackenridge & Co.	413
Breimeyer, J. & Sons	405
Brenneman & Pette-son	413
Brown & Canfield	408
Brown, Robt. S. & Son	411
Burrows, J. E.	410
Carmody, J. D.	418
Chandler, B. B.	417
Chippin, Bros.	408
Chitty, H. F.	412
Clark Bros.	407
Coles, W. W.	408
Cook, J.	403
Crane, A. H.	405
Currie Bros.	402
Curwen, John Jr.	405
Desmond, Wm.	405
De Veer, J. A.	405, 409, 410
Devine, Peter	417
Dier, John L. & Co.	417
Dillon, J. L.	405, 410
Dingee & Conard Co.	405, 412
Dreer, H. A.	405, 409, 414
Dudley, J. W. & Son	412
Elliot, B. A. & Co.	410
Ellis Bros.	415
Ellwanger & Barry	414
Fackett, F. E. & Bro.	408
Faxon, M. B.	408
Fink & Co.	413
Fletcher, Wm.	411
Garden & Forest	409
Giddings, A.	406
Goldman, N.	410
Greene, W. W., Son & Sayles	408
Grey, Benj.	408, 413
Griffith, Jas.	410
Griffin, N. S.	415
Gurney Heater Co.	417
Hales, H. W.	418
Hallack, V. H. & Son	408
Halsey, Wm. F.	408
Hammond, Benj.	409
Hammond & Hunter	405
Hancock, Geo.	407, 412
Harold, Thos. G.	409
Hart, Joseph	410
Heinz, Chas.	408
Henderson, P. & Co.	413
Henderson Mfg. Co.	410
Herr, Albert M.	410
Hiles, Henry G.	410
Hilfinger Bros.	410
Hilppard, E.	411, 417
Hitchings & Co.	418
Hoffman, H. M.	413
Hooker, H. M.	418
Hopkins, L. D. C.	410
Hurr, Freeman	410
Ives, J. H.	418
Jacob, Chas. W.	410
Jansen, Ed.	407
Kadletz, J.	403
Kelsey Bros.	412
Kennicott Bros.	405
King, James	415
Krelage, E. H., & Son	409
Krick, W. C. G.	405
Larkin, Isaac	412
La Roche & Stahl	405
Lee, D. & Son	415
Lockland Lumber Co.	410
Loose, Jno. L.	406
McAllister, F. E.	403
McBeth, Thos. A.	407
McCarthy, N. P. & Co.	405, 414
McCluer, G. W.	414
McFarland, J. Horace	413
McFetish, G. A.	409
Malsh, M. W.	405
Mathews, Wm.	405
May, J. N.	403
Merrick, A. T.	416
Michel Plant & Seed Co.	412
Miller, Geo. W.	413
Monon Route	417
Moon, Samuel C.	408
Morat, Edw.	403
Mullen, Geo.	405
Myers & Co.	418
Nanz & Neuner	405
Pennock, Chas. E.	405
Perkins, J. N.	410
Phelps, H. I.	410
Phila. Im. Design Co.	416
Plenty, Josephus	417
Reasoner Bros.	408
Reed & Keller	417
Reimers, Chas. W.	407
Renard, Jos.	405
Richter, Frederick	410
Rolker, A. & Son	409
Rupp, Geo. H.	412
Safford, Geo.	413
Saul, John	413
Schiller & Mallander	412
Schmied & Pottler	409
Schofield, D. C.	416
Schulz, Jacob	405
Scollay, John A.	413
Segera Bros.	409
Sibley, Hiram & Co.	408
Siebrecht & Wadley	413
Simmons, W. P. & Co.	413
Situations, Wants etc.	413
Smith Floral Co.	413
Smith, H. B. Co.	415
Solly, Geo. A. & Son	405
Spencer, Wm. H.	410
Starr, Chas. T.	412
Steffens, N.	417
Stewart, Wm. J.	405
Stinson, E. A. & Co.	411
Strauss, C. & Co.	410
Studr, N.	410
Swayne, Wm.	412
Taylor, Jno. H.	409
Temple, J. T.	411
Thompson, G. & Sons	413
Tucker, A. C.	409
Tuttle, Sidney & Co.	410
Ucker Bros.	409
Van der Schoot & Son	408
Vaughan, J. C.	405, 408
Vare, Thos. S.	407
Weathered, Thos. W.	415
Welch Bros.	405
Whitlin Pottery Co.	410
Wilber, Edw. B.	414
Wilks, S. Mfg. Co.	416
Williams, H. W. & Son	411
Wood, I. C. & Bro.	410
Woolson & Co.	411
Yonne, Thos. Jr. & Co.	405
Zirngiebel, D.	409



Sectional View.

## Greenhouse Heating AND Ventilating



Send 4 cents postage for Illustrated Catalogue.

## Improved Hot Water Boilers

For Heating

Greenhouses, Graperies, CONSERVATORIES, ETC.

ALSO

Cast Iron Pipe, Fittings, Valves and all Material for Heating by Hot Water.

Send for Catalogue.

**MYERS & CO.**

1173 So. 9th St.,

PHILADELPHIA.

## OUR NEW TRADE DIRECTORY

Contains over

6,000 Names of (Live) Florists, nurserymen and seedsmen in the United States and Canada.

PRICE ONLY ONE DOLLAR.

AMERICAN FLORIST CO., Chicago.



## GREENHOUSE HEATING AND VENTILATING.

Superior Hot Water Boilers.

JOHN A. SCOLLAY,

74 & 76 Myrtle Ave., Brooklyn, N. Y.  
22¢ Send for Catalogue.

## SOMETHING NEW

## Heating \* Apparatus

— FOR —

## GREENHOUSES.

Send for Illustrated Catalogue.

J. D. CARMODY,

EVANSVILLE, IND.



ALL SIZES OF SINGLE AND DOUBLE THICK

## GLASS FOR GREENHOUSES.

ALL GLAZIERS' SUPPLIES.

Write for Latest Prices.  
Mention American Florist.

## Ives' Putty Machine.

Patented Jan. 8, 1887.

The best device ever invented for laying putty. With this you can make old leaky sash perfectly tight without removing the glass. It will do the work of five men in bedding glass.

Sent by Express on receipt of price, \$3.00.

J. H. IVES, DANBURY, CONN.

## HALES' MOLE TRAP

For destroying ground moles in lawns, parks, gardens and cemeteries. The only PERFECT mole trap in existence. Guaranteed to catch moles where all other traps fail. Sold by seedsmen, Agricultural Implement and Hardware dealers, or sent by express on receipt of \$2.00 by H. W. MALES, RIDGEWOOD, N. J.

# THE AMERICAN FLORIST



*America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."*

Vol. III.

CHICAGO AND NEW YORK, MAY 1, 1888.

No. 66.

## THE AMERICAN FLORIST

Copyright, 1887, by American Florist Company.  
Entered as Second-class Mail matter.  
Published on the 1st and 15th of each month by  
THE AMERICAN FLORIST COMPANY.  
GENERAL OFFICES, 54 La Salle Street, Chicago.  
EASTERN OFFICE,  
Room 81, Vanderbilt Building, New York.  
All communications should be addressed to the  
general office at Chicago.

SOCIETY OF AMERICAN FLORISTS.—E. C. HILL,  
Richmond, Ind., president; John N. May, Sum-  
mit, N. J., vice president; M. A. Hunt, Terre  
Haute, Ind., treasurer; Wm. J. Stewart, 67 Brom-  
field street, Boston, Mass., secretary. The fourth  
annual meeting at New York, August 14, 15, 16,  
1888.

### Easter Plants.

We wish to particularly call the atten-  
tion of our readers to the article under  
this head by Robert Craig in another col-  
umn. As was noted in our report of the  
Easter trade in last issue, the call for  
blooming plants at Easter has been rap-  
idly becoming more general; and it  
will undoubtedly become larger each  
succeeding year. Florists will do well to  
make preparations to supply this de-  
mand, and to foster the same by placing  
upon the market at that time a good  
quantity of plants of the first quality;  
plants which are not only well covered  
with bloom, but which have been suf-  
ficiently hardened to stand delivery with-  
out serious injury to the flowers then  
open.

The excellent prices which can be ob-  
tained for plants of the first quality at  
that time is not the only inducement to  
the grower; the great value of a crop  
which can be made in itself very profit-  
able, and then be cleared out of the  
houses early in April—so early that the  
houses may be easily refilled with bed-  
ding stuff—is at once manifest.

But do not attempt to grow second or  
third quality plants for Easter. Spare no  
effort to have them first class, and to  
bring them in at the right time. Watch  
the plants carefully and whenever you  
note a number which are coming too  
fast, place them back in a cooler house;  
and if any are lagging, place in a little  
more heat. Sort them frequently and  
keep them uniform. Read Mr. Craig's  
article carefully; the dates at which the  
various plants and bulbs should be  
started and the manner in which they  
should be handled in order to have them  
in bloom at the proper time—a point of  
the first importance—may be relied upon,  
as they are from actual experience of a  
most successful grower of Easter plants.

MAKE UP your mind now to attend the  
New York meeting, and arrange your  
business affairs accordingly.

Pennsylvania Horticultural Society's  
Spring and Bulb Show at Phil-  
adelphia.

One of the oldest members of this time-  
honored institution remarked—during  
the progress of the last annual spring ex-  
hibition—that if a record had been kept  
of the weather which prevailed at the  
time of its flower shows ever since its or-  
ganization, that none had been held with-  
out at least one stormy day intervening.  
The last was no exception to the rule. A  
cold pelting rain fell during the opening  
day and evening, which lessened the  
number of exhibitors and visitors. There  
were fewer exhibits in horticultural hall  
than we remember to have seen for some  
time. The cut flowers were arranged in  
the foyer, which is not usually the case  
at the spring show. The space in front  
of the stage where the cut roses, etc. gen-  
erally are located was occupied by a fine  
group of rhododendrons—a new feature  
in Philadelphia. Mr. H. Waterer de-  
serves great credit for this display. What  
the show lacked in quantity was amply  
made up in quality.

Philadelphia never could until this  
year boast of anything approaching an  
orchid show, and she is justly proud of  
the efforts made in that direction on this  
occasion. Thanks to Mr. George Savage  
and his assistant, Mr. Swift, gardeners to  
W. S. Kimball, Esq., Rochester, N. Y., a  
collection worthy of that renowned es-  
tablishment was safely landed here and  
artistically arranged. Messrs. Siebrecht  
& Wadley, New Rochelle, N. Y., also  
had a collection containing some note-  
worthy specimens. Amongst the local  
talent Mr. David Emery, gardener to  
Charles Dissel, Esq., had a creditable  
collection, so also had William Jameson,  
gardener for R. S. Mason, Esq.

The medals offered by the "General  
Union of Holland for the Promotion of  
the Cultivation of Bulbs," were not very  
strongly competed for, there being only  
one entry for the gold medal in the class  
for fifty hyacinths, whereas last year  
there were seven entries, five of which  
were staged in competition on the open-  
ing day. Two of last year's competitors  
claim that by mistake the bulbs which  
had been selected with great care with  
the view of entering them for the medal  
were put into the heat too soon, conse-  
quently were too far gone for exhibition.  
Another reason was, the 10th of April is  
rather late. Last year the bulb show was  
held on March 15, hence the greater num-  
ber of exhibits. Mr. William Jameson,  
who carried off the gold medal, said he  
would rather have to force a hyacinth  
than retard it. His collection reflected  
great credit on his selection of varieties  
and the way they were flowered. Mr.  
Geo. W. Earl, the oldest vice president  
of the society in continuous service, now  
on the list, and one of the most enthu-  
siastic amateurs and best judges in the

city, says there were some varieties among  
the assortment that had never before  
been imported.

Tulips made a creditable display. John  
M. Hughes, gardener to Geo. W. Childs,  
Esq., was awarded first prize—a silver  
gilt medal—for the best 25 pots, 3 bulbs  
of the same sort in a pot, 25 distinct  
sorts. William Jameson, gardener to R.  
S. Mason, Esq., was awarded second—a  
silver medal. The society's premium,  
\$10, was awarded to Wm. Jameson for  
the best 25 hyacinths in pots; second, \$6,  
to John M. Hughes. For 12 hyacinths  
the first and second premiums were  
awarded in the same order as above re-  
corded. Tulips, 6 varieties, first, Wm.  
K. Harris; second, Wm. Jameson. Tulips,  
one box containing not less than 50 bulbs  
in bloom, first, \$5, Wm. K. Harris. John  
M. Hughes was awarded first for tulips,  
12 varieties in 12 6-inch pots, 3 of a kind  
in a pot. Trumpet varieties of the nar-  
cissus were conspicuous by their absence;  
this is to be regretted as they are amongst  
the most beautiful of spring bulbs. Wm.  
Jameson took the first for Polyanthus  
narcissus. Hugh Graham's son carried  
off first for specimen lily—Lilium Harrisii  
—also for 6 plants of the same variety.  
They were exceptionally large and fine  
plants. John M. Hughes had 6 beautiful  
pots full of lily of the valley, for which  
he was deservedly awarded the first pre-  
mium. George Savage, gardener to W.  
S. Kimball, Esq., received first, \$50, for  
the best collection of orchids, and speci-  
als for orchid cut blooms, \$10, for An-  
thurium Andreanum blooms \$5, and sec-  
ond for rose, "Her Majesty," cut blooms.  
Siebrecht & Wadley second for collection  
of orchids, \$30, and a special, \$15,  
for cut orchids.

The azaleas were not equal to those  
exhibited last year. The best plant was  
put in competition by David Emery,  
gardener to Charles Dissel, Esq., as a  
specimen white. It was in the shape of  
a cone, though not over-trained. H.  
Waterer received third for 6 azaleas, \$15;  
third for 4 plants, \$10; first for 12 rhodo-  
dendrons, \$25, and first for specimen  
rhododendrons, \$5. Fred. R. Sykes, gar-  
dener to Mrs. H. Ingersoll, third for two  
azaleas, \$5. J. William Colflesh received  
second, \$10, for 12 Zonale Pelargoniums.

One of the most notable exhibits was  
a specimen fuchsia, exhibited by David  
Emery; it was an evidence of what can  
be done with the fuchsia if it is taken in  
hand in earnest. It is certainly one of  
the best plants for spring exhibitions  
that we have. The variety seemed to be  
what is locally known as "Black Prince,"  
but how it ever became dubbed that title  
is very hard to understand, for there is  
nothing about the flowers or foliage to  
suggest that name. However, it is a  
"Prince" among good fuchsias, and the  
plant in question was fully six feet high  
and well "furnished" with foliage and



flowers from the pot upwards. The color of the tube and sepals is light red while the corolla is a rosy purple. According to the premium list the first prize is \$4, second, \$2, but so well pleased were the judges with this specimen of good culture that a special of \$10 was awarded. This is as it should be. When an exhibit is really worthy of a higher premium than the schedule calls for, all committees of awards should follow this rule, and show their appreciation of good culture by making the award amply adequate. And they should, also, as this committee did, withhold first or second premiums, or all premiums, if the exhibits do not come up to the standard.

The only pot rose, or rose growing in a pot, exhibited was one from Wm. K. Harris. It was a well grown *Magna Charta*; first premium, \$5, was awarded. There were only two ferns in the exhibition but as both of these were examples of good culture, we must be satisfied; first was awarded to David Emery, \$5, second to Hugh Graham's son, \$3. The latter exhibitor also secured first prize for 6 hydrangeas, \$10; second, \$5, to W. K. Harris. First, \$5, for specimen hydrangea, to Hugh Graham's son; to same exhibitor first for 6 *Spiraea Japonica*. David Emery first for 12 well grown cinerarias, \$10. W. K. Harris first for 6 amaryllis. First for 25 pansy plants in bloom to Fred. R. Sykes. First for *Marguerites* to Hugh Graham's son. Second premium only to F. R. Sykes for 12 *Polyanthus* or hybrid English primrose. There were two competitors for the honors in the class for 6 *Primula obconica*. Wm. Craigmille took first, F. R. Sykes second. This variety has never been seen here before in anything like good shape. These plants made a very favorable impression and both florist and amateur will at once begin to get up stock.

The competition in the cut flower class was not very strong, though quite spirited. In the "grower's" list, which is only open to those who exhibit that which is grown by themselves, either amateurs, gardeners or growers commercially, here meet in friendly combat. Mr. C. F. Evans, the Rowlandville florist, and Thomas Foulds, gardener to Wm. M. Singler, were pitted against each other. It will be remembered by readers of the *FLORIST* that both these gentlemen are champions of the Puritan rose. Mr. Foulds was awarded first for 12 *Perles des Jardins*; second to Mr. Evans. First for *Cornelia Cook* to Mr. Evans. First for *The Bride to Clarence Ramsden*. And such Brides! They were acknowledged by all who saw them to be the finest Brides ever before seen here or any other place. The same may be said in reference to *Niphetos* also exhibited by Mr. Ramsden. First for the Bennett to Mr. Foulds; second, Mr. Evans. First for *Papa Goutier*, C. F. Evans; second, Thomas Foulds. First for *Catherine Mermet*, Thomas Foulds; second, C. F. Evans. First for 6 *American Beauty*, C. F. Evans; second, Thomas Foulds. First for *La France*, C. F. Evans; second, C. Ramsden. First for *Bon Silene*, Thomas Foulds; second, C. F. Evans. First for *Hier Majesty*, C. F. Evans; second, George Savage. Special, \$2, to C. F. Evans for Mrs. John Laing. A silver medal was awarded to C. Ramsden for the rose—called conditionally, "The Gem"—(This award was afterwards changed to a cash premium, because of the uncertainty hanging over its origin.)

In the "Florists" class for cut flowers it will be noted that in this competition

an exhibitor is privileged to buy wherever he pleases. It is a question of enterprise, capital and good judgment, and not one of skill. The first premium for a collection of cut carnations was awarded to Evans & Battles. They were also awarded first premiums as follows: *Niphetos*, *Cornelia Cook*, *The Bride*, *Comtesse de Frigneuse*, *Catherine Mermet*, *La France*, *Mad. Cusin*, *Bon Silene*, *Hier Majesty*, also for a collection of hybrid remontant roses. Pennock Bros. were awarded first premiums for 6 *American Beauty*, 12 *Bennetts*, 12 *Sunsets*, 12 *Perles*. Robert Crawford, Jr., received second premiums for 6 *American Beauty*, 12 *La France* and 12 *Bon Silene*. Evans & Battles were awarded seconds on *Perles*, *Sunsets* and *Bennetts*; C. H. Grigg second for collection of H. Rs. Robert Crawford, Jr., also received special premium for a vase of beautiful single daffodils (*Trumpet narcissus*). Specials were awarded also to the following: William Swayne for his new carnations, "Swayne" and "Lamborn"; C. F. Evans for a vase of *Jacquemiot* roses; Thomas Foulds for roses, M. Niel, *Gloire de Dijon*, *Safrano* and *Princess Beatrice*; also for tomatoes; David Emery for *Anthurium Scherzerianum* and *Medinilla magnifica*; Hugh Graham's son for a collection of plants.

The committee on bouquets, designs, etc., reported as follows: First premium for 6 corsage bouquets, Hugh Graham's son; second, Robert Crawford, Jr.; for plateau, first, Hugh Graham's son; second, Evans & Battles; first for *Jardiniere* of spring bulbs, John M. Hughes; gardener to C. W. Childs, Esq.; brides bouquets, first, Hugh Graham's son, second, John Dick, Jr.; for pair bridesmaids bouquets, second, Miss Annie Bisset; first for vase of roses, Hugh Graham's son; second, Pennock Bros.; and specials to the following: For Brides bouquets, Miss Annie Bisset; to H. C. Sheaffer for basket of flowers; to La Roche & Stahl, and the Haddon Floral Houses for plateaus; and to Evans & Battles for a small vase of roses.

There was some critical comment made about the hall not being so well filled as usual, but these unkind cuts came from those who have never been known to do a hand's turn of a public character. There was an absence of trash, which heretofore has been too often brought in to "fill up." What there was to be seen was worthy of critical examination, and appealed directly to the true florist. Taking it altogether it will long be remembered as the best spring show ever held in this city. The orchids alone were well worth coming a long distance to see. One of the local evening papers was equal to the occasion and declared "that orchids are the aristocrats of the floral kingdom." In speaking of the good keeping qualities of orchids, Mr. Henry C. Gibson, an enthusiastic amateur, said that he had a flower of *Phaleopsis Schilleriana* open on December 28, 1887, and it was still in good condition at Easter. Mr. Kimball's collection contained upwards of fifty varieties. Siebrecht & Wadley's about 35 plants.

E. L.

#### NOTES.

Among Mr. Kimball's orchids were the following rare varieties: *Cypripedium caudatum*, *Cattleya Schröderii*, C. *Lawrenceana*, *Cypripodium Andersonii*, *Dendrobium Wardianum* Lowii, *Cypripedium Druryi*, C. *candidulum*, *Phaius Wallichii*, *Epideudrum Stanfordianum*, in addition

to many other beautiful and rare kinds. Mr. Kimball never does anything by halves.

Among the rhododendrons exhibited by H. Waterer were some very handsome and distinct varieties such as *Countess Beauford*, *Anthony Waterer*, *Everestianum*, *Roseum elegans*, *Grandiflorum*, *Roseum Superbum*, *Duke of Teck*, *John Waterer* and many other choice sorts. This exhibitor also showed a few good varieties of azaleas, amongst which were *Bernard Andrea Alba*, *Madam Van der Crysen*, *Roi des Holland*, *Adolph of Nassau*, and other sorts of merit.

In the center of the hall was a handsome pyramid of *Asparagus tenuissimus* vines which were festooned from the center table to the chandelier forming a very effective and graceful decoration.

It was much regretted that Mr. Robert Craig, one of the best officers of the Society was obliged to be absent on account of ill-health; the first time since he has been a member, that he has not taken an active part in each exhibition of the society.

HENRY A. SIEBRECHT.

#### New York Notes and Comments.

We are not likely to see any private rose shows here this spring. As one of the florists says, people can see as fine a display by going from one store to another, as they would in an exhibition, and these shows are not the novelty they once were. To be a success, a New York flower show must be very original, and very much advertised. All the stores are very attractive now; flowers are exceedingly plentiful, and for the most part exceedingly fine.

Many complain of low prices; it is an undoubted fact that a great many new flowers are now daily sent into New York than the city can use. One well-known veteran florist advises the growers to raise potatoes and such "garden sass," which he thinks likely to sell better than roses. Mr. Thorpe appears to have that same impression; he is forcing cauliflower flowers, which connoisseurs in that vegetable consider remarkably fine.

The new rose "Oakmont," raised by Mr. James Comley, of Lexington, Mass., seems likely to be quite an acquisition to our stock. It was first exhibited in New York at the orchid show last year, and Mr. Comley says that subsequent experience with it shows all the vigor and free blooming qualities so desirable in a trade flower. It is a hybrid tea, cross between *President* and *Baroness Rothschild*, and has been in existence about five years; the grower has spent all this time in perfecting it. It has the same smooth, globular petals and soft pink as *Paul Neyron*, though with a silvery tinge on the outside of the petals more suggestive of *La France*. It possesses the characteristic tea fragrance to a marked degree, though its general appearance is suggestive of its hybrid remontant parent. The bud is the regular conical tea shape, though not excessively pointed. The color stands very well after cutting; it does not seem to acquire the blue tinge so often seen in pink roses. In some respects *Oakmont* is rather suggestive of pretty Mrs. John Laing.

Mr. Peter Henderson had a new rose at the last meeting of the Florists' Club; an unnamed hybrid tea raised by Mr. Bennett of Shepperton. It was the first flower developed in America, and as it was from a very small plant it could only give the least idea of the rose. It was

Why is it that so many growers declare that it does not pay to grow ferns around New York, while so many florists say that they are obliged to go over to Philadelphia and other out of town places to buy such plants? However a lot of the go-ahead men are going in for ferns and palms, and we shall see a good many more decorating plants grown in a year's time. *Ardisia crenulata*, for example; the market is never overstocked with it, and around the holidays well-berried plants in 6-inch pots sell admirably for paying prices. It is a wonder that it is not more extensively grown for the retail trade; every one admires it, and it is a good thing for the house, taking no

though, business is likely to improve, as the tenants of pretty villas and cottages are going in more for well-kept gardens. It certainly pays a suburban florist to make his own place as attractive as possible, and to strike out new ideas in bedding. A man who decorates his place with picturesque groups of sub-tropical plants is very apt to sell more of them than of cheap bedding plants, to the manifest benefit of his pocketbook—that is, of course, if he is located in a good neighborhood. In some suburban localities, the people have a pernicious habit of clubbing together to buy a lot of cheap stuff at the auction sales, to the profound disgust of the local florists. The plants are usually good, and they are excessively cheap, but whether auction sales are a benefit or the reverse is one of the questions likely to bob up in the question box at every florists' convention.

Railway gardening—that is to say, bedding out at the railway stations—is likely to be much more extensive this season than last; a great many plants will be used in this way. In places where the railway company is a soulless corporation without any regard for horticulture the adjacent property owners often take it into their own hands, as the added beauty really improves the value of the place. It is an idea to be encouraged from a standpoint of business as well as aesthetics.

EMILY LOUISE TAPLIN.

#### Easter Plants.

BY ROBERT CRAIG.

There is nothing more remarkable in the whole range of the florists' business than the amazing increase in the demand for showy and attractive plants in pots for Easter; both for church decoration and for the adornment of dwellings. The annual increase in this branch of the trade has been very noticeable in Philadelphia during the past five years; each succeeding Easter a larger number of plants being used—the Easter just passed exceeding all others in the volume of trade. This great increase is due; first, to the disposition to use more plants in the churches; in former years only two or three denominations used them, but the idea is spreading, and it is to be hoped that so beautiful a custom shall soon be universal. Secondly, the fashion (for it is now the fashion) of sending presents of plants to friends at that time; this has now become very general, and has, to a great extent, displaced the gifts of cards, etc., so common in years gone by; the demand is growing for handsome specimen plants, for which liberal prices are cheerfully paid. A walk along Chestnut, Walnut, Spruce, or any of the best streets of Philadelphia on Easter Sunday morning, would have revealed many, very many, of the windows of the houses, handsomely decorated with flowering plants; and what a variety has taken the place of the calla lilies and geraniums of former days—the glorious lilies, *Harrisi* and *longiflorum*; the gorgeous hydrangeas; the graceful acacias and genistas; the handsome specimen azaleas and rhododendrons; the hybrid and other roses; the *pelargoniums*, *deutzia*, *astilbe*, *mathiolas*, *hyacinths*, tulips and hosts of other plants.

To many of our plant growers the week preceding Easter is the largest in point of sales of the whole year. With the increasing demand, year by year, for fine specimen plants, has been developed gradually more skill in growing them, and greater precision in bringing them



L. HARRISII.  
5 feet high.

Improperly grown.



L. LONGIFLORUM.  
2 feet high.

L. HARRISII.  
2 1/2 feet high.

[Measurements are exclusive of pot.]

Well-grown, and of the heights that sell most readily.

#### LILIES IN POTS FOR EASTER.

very double, very fragrant and soft light pink in color.

There was a good deal of convention talk at the club meeting, as well as the discussion of Mr. Thorpe's paper. Mr. May told about the bright club meeting he had attended in Baltimore, especially referring to the use of the question box, which the New York club proposes to adopt also.

One of the many handsome stores in the upper part of New York is that of McCunnell & Grimshaw, on Madison avenue. They sell a great many fine plants and ferns, which they grow at their large place on Staten Island, in addition to cut flowers. Like every one who grows ferns for florists' use, they give chief place to *Adiantum cuneatum*; *A. Farleyense* is beautiful for cut flower work, but it is rather too good to be slashed up promiscuously, and one never sees a very great quantity of it used.

notice of a little neglect. It would, perhaps, sell best at Christmas and New Years; people are more likely to want flowering plants at Easter and Decoration Day. But it can be furnished well covered with berries, all the year round.

Tulips are beginning to be very scarce, which will give roses a better chance. Unfortunately for the florists, and for many other trades, people seem to leave town earlier every year, and they are later in returning, which makes the season a very short one. The only thing the florist can do is to follow them in their exodus, like Mr. Hodgson, who attends to his customers in New York during the winter, and follows them to Newport in the summer.

Of course there is a certain amount of bedding and window-gardening to be done at this season, but many people who leave town for the summer neglect this altogether now. In suburban places



into flower, just when wanted; this is a most important part of the work; a houseful of lilies or roses coming in a week after or a week too soon, means a serious loss; the most careful attention to details of temperature is necessary and it should be borne in mind that it is better to be a week too early than a day too late, for it is easier to retard than to hurry the development and the weather (as was the case this year) is sometimes persistently cloudy for a week or two before Easter. Below will be found a few notes of the methods of culture, as pursued by our most successful growers.

*Lilium Harrisii*.—In former years it was the custom to save the bulbs from year to year, or to grow from sets to sufficient size; but now the best bulbs can be obtained from Bermuda, or from the dealers who bring them thence, at a price so low that it is not worth while to save those that have once been forced or to grow young ones on, under the disadvantages of this latitude; the bulbs arrive from Bermuda early in the fall and should be potted into 5-inch, 6-inch or 8-inch pots, according to size; the 8-inch being suitable for the very largest, measuring, say, four inches in diameter. For Easter use they should be potted during the latter part of October to middle of November, and put in cold frame and well watered once only, and next day covered with four or five inches of ashes and protected from the rain by a covering of sash; give all the air possible and leave them in the frame until about January 1, when they should be brought into a temperature of 50° until they make roots and begin to grow; then move into a warmer house, say temperature 60° to 70°; in this temperature they will come in about ten weeks; the longer they are kept cool and somewhat dry the shorter the plants will be; if tall plants are required, they should be kept a little warmer (say 55° to 60° at the start) and freely watered; it is quite easy to have them any height, from six feet down to two feet—the latter being a very desirable size for windows, while the taller ones are adapted for church decoration.

*L. longiflorum* Requires pretty much the same treatment; the dryer and cooler it is kept during the earlier stages of growth the shorter will it also be; it can not be grown as tall as it is possible to grow *L. Harrisii*; about four feet being the maximum height in pots; the flowers of this variety, while not quite as showy as *Harrisii*, are of greater substance; will keep longer, either cut or on the plant, and are better adapted to ship long distances; to ship either safely, cotton should be packed inside as well as outside the flower, to prevent their being crushed by pressure.

*Hydrangeas*.—Two varieties are commonly grown for Easter purposes, viz.: *otaksa* and *Thomas Hogg*. When well grown they are both grand, but *otaksa*, from the superior size of the flowers and stronger growth, is the more showy; but the pure white color of *Thomas Hogg* makes it also indispensable. To obtain a fine plant in an 8-inch pot for Easter, the cuttings of either variety should be struck in January or February of the year previous and after being well-rooted in 2-inch pots, should be shifted into 4-inch about the middle of March, where they can remain until middle of April, when they should be in a condition to shift into 6-inch pots, and be put outside (plunged in old hops or ashes) in frame and be grown on to receive their final shift into 8 or 9-inch pots, the latter part of July; the main thing to be looked to

is growing hydrangeas to flower well at Easter, is to have the wood well ripened before they are taken inside again; it will not do to dry them off too early, as thereby the wood is weakened to the detriment of the future bloom; they should be watered freely until the middle of October; then the water may be gradually withheld until the foliage partly drops; after which they may be kept quite dry to advantage; it is economy to leave them in the frame as long as they can be kept from injurious frost (if quite dry and the wood ripe, they will stand 10° degrees of frost without injury); give them all the air possible during November and December, night and day, and bring them into the house about ten weeks before Easter; first into a temperature of 50° which may be gradually increased to 65° or 70° without injury; they will come into bloom in about eight weeks, but it is well to allow ten, so that they may be hardened in a lower temperature two weeks before using; a hydrangea suddenly taken from a temperature of 70° and put in front of a florist's store, where the wind can blow on it, is soon a sorry object. The finest houseful of hydrangeas I ever saw was grown for Easter of 1887, by James Dean, Bay Ridge, L. I., they were in 8-inch pots and so perfect that they found a ready sale at five dollars each, while plants grown here in Philadelphia of same size shown side by side would bring only half the money; but the Philadelphia are beginning to know how to "do" them, and large lots of very creditable plants were in the market this season, but as Robert Kift's song says "they will do it still better next year."

*Azaleas*.—These are now largely used for Easter work; those grown as standards and half-standards, with straight stems and symmetrically trained heads are the handsomest; these are usually obtained from Europe as they can be bought cheaper there than they can be grown here; the best time to import them is early in November; they should be immediately potted, in pots as small as possible, and the soil (a mixture of one-third each, peat, sand and loam) should be very firmly packed; the only treatment necessary to have them at Easter is to keep them as cool as possible, without freezing; giving air frequently; treated thus, they usually come about the right time, or may be hastened by extra heat, or retarded by shading, according to the weather as Easter approaches. Among the very best varieties for commercial purposes are *Mad. Van der Cruyden*, deep pink; *Dr. D. Moore*, large double bright rose; *Bernard Andrea Alba*, double white; *Empress of India*, salmon, pink and white; *Marquis of Lorne*, double, bright red; *Postmaster Stephen*, deep bright maroon; *Apollo*, bright dark red. *Deutsche Perle* is also a fine double white, but is more useful as an early one; can be had at Christmas.

*Cerisia*.—This plant is now grown largely for Easter and is very effective with its profusion of bright yellow pea-flowers in graceful sprays; of easy culture; it should be struck in February or March, and grown on in pots (plunged) all summer and wintered as cool as possible without freezing; is very attractive when grown as standards and can be kept for many years, but is perhaps at its best when three or four years old.

*Daulzia*.—The variety usually grown is *gracilis*, a delicate graceful plant; in order to have the flowers open perfectly it should be grown in pots or lifted from

the open ground in latter part of August, so that the pots may become filled with roots before cold weather sets in; when lifted in November they cannot make roots in time to perfect their flowers by Easter.

*Astilbe Japonica*.—Very attractive and of the easiest culture; the clumps arrive from Holland in November; should be potted and kept in cold frame, covered with six inches of ashes, until about twelve weeks before Easter; then brought in; first, into a temperature of 45° to 50° and when well rooted the temperature may be increased to 60°; when growing, requires abundant water, and to be placed not too close, to allow foliage to develop.

*Hybrid Roses*.—To be at their best should have been pot grown during summer, and require about ten to twelve weeks to bloom, after having been brought in from cold frames; among the best for pot culture are *Baroness Rothschild*, *Ulrich Brunnner*, *Merveille de Lyon*, *Countess of Oxford*, *Queen of Queens*, *Magna Charta*, *Gen. Jacqueminot*. Start in temperature of 45° and gradually increase to not exceeding 60°; the lower the temperature the better, provided they can be bloomed in time; much depends on sunshine, or the want or it.

Philadelphia, April 9, 1888.

#### Long Island Plant Notes.

BY WM. PALCONER.

*ST. BRIDG'S ANEMONES* are very large flowering forms of our crown anemones. I have had them in bloom in a warm frame since February. Raised them from seed soon last spring.

AMONG my single hyacinths this year I have Mr. Plimsol, white; Lina, crimson; Obelisque, yellow; King of the Blues, dark blue; John Bright, light blue, and Fabiola, rose striped, and they are about as fine as anything I have ever grown. All of these have behaved unusually well. We seldom see a very good yellow hyacinth, but in Obelisque I have as finely developed and perfect spikes of flowers as I have among other colors, and the yellow color is a good yellow too.

*DORONICUM PARDALIANCHES*, a hardy herbaceous perennial with yellow sunflower-like flowers has been in good bloom in a frame since the first of February. It is perfectly hardy and easy to grow and one of our earliest spring flowers, capital for amateurs, but not suitable for florists for cut flowers. *Doronicum Caucasicum*, a dwarfier species is perhaps a more desirable kind, but D. Harper Crew, an English-raised plant, and which I have not yet obtained, is spoken of as being the finest of these showy composites.

I HAVE GROWN and flowered *Hydrangea rosea* for the past three years. Until this year the flowers have, without exception, been of the most lovely rose or rose-pink color, and this has been the case in my forced and outdoor plants. But this year all my plants, so far, have bluish flowers; indeed, some of the flowers are of the brightest blue color I ever saw in hydrangeas. I used no iron or peat in the soil nor grew the plants in any way different from what I used to do when the flowers all came rose-colored. While the bright blue is extremely beautiful, the bluish-rose shades are not at all as desirable as the typical rose color. After all, I guess *Thomas Hogg* is the only reliable hydrangea for the cut flower florist.

WOOLSON of Passaic, has got a beautiful lot of hardy plants in bloom in his



A HOUSE OF *LILIUM HARRISII*, AS GROWN BY ROBERT CRAIG. FROM A PHOTOGRAPH TAKEN A FEW DAYS BEFORE EASTER [NOTE UNIFORMITY IN HEIGHT.]

frames and greenhouses. Among them are a most numerous assortment, species and varieties, of narcissus, and the lovely *Shortia galacifolia*. A word about this *Shortia*: In 1778 Michaux discovered a *Pyrola*-like plant in the mountains of North Carolina, and secured the specimen, which was in fruit, but not in flower, for his herbarium. Beyond that specimen, not another vestige of the plant, dead or alive, had ever been seen till 1878, when the plant was rediscovered by Mr. G. M. Hyams of Statesville, N. C., and in, it is believed, the same locality where Michaux found it. Dr. Asa Gray named it from Michaux's specimen in compliment to Dr. Short of Kentucky. Mr. Hyams sent plants of it to Prof. C. S. Sargent, and these flowered in the spring of 1879, for the first time in cultivation. Even then and for some years after only a few plants had been discovered, but within the last few years it has been found in considerable quantity.

MR. PETER HENDERSON can't get up much enthusiasm among his customers for amaryllises; anything that costs over 50 cents a plant can never become universally popular, and it wouldn't pay to raise and sell hybrid amaryllises at that price. But he has some beauties now in bloom. He lays them under the benches in the fall, and takes them up as they show flower toward spring.

MR. HENDERSON considers *Lilium Harrisii* far more satisfactory than *L. longiflorum* for forcing. Every bulb of

the *Harrisii* will bloom; sometimes a few of the longiflorums go "blind." Six inch pots are his regulation size for *Harrisii* lilies, but many very small bulbs that he had potted into and grown along in 4-inch pots have made fine strong plants and all are now in bloom.

#### Baltimore Plant Notes.

At the late exhibition Mr. Jas. Pentland had a very pretty collection of the good old-fashioned polyanthus—these pretty plants are seldom grown by the commercial florist, although they ought to be; they are well adapted for early sales and require little care to grow, the treatment for violets or pansies will suit them, and the plants may be grown from seed or increased by division. Mr. John Cook showed a fine bunch of the white lilac Marie Lequay, over which he is quite enthusiastic; he has given it a start in this city which will result in its general culture by our florists. Mr. Cook had also a very handsome specimen—in 5 inch pot—of *Primula obconica*, another plant that everyone ought to grow; it is a most excellent variety, when in bloom, for decorative purposes, and the flowers if cut, will keep in water for ten days or two weeks, if the water is renewed occasionally. I have not had very extensive practice in growing this *primula*, but what few I have grown I treated exactly the same as the Chinese *primula*, they like plenty of light, but should be protected from strong sunshine. I have

generally increased my stock by dividing the old crowns, but I am inclined to think that more satisfactory results are obtained by raising the plants from seed—at least I have found it so—it is also better to save one's own seed if possible, if sown immediately after ripening it will soon germinate. Mr. Cook is very successful in the culture of this *primula* and promises to furnish a few hints on its treatment, for a future issue of the *FLORIST*. While making these notes of the exhibition I must not forget to mention that I had the pleasure on that occasion of meeting Mr. W. J. Stewart, of Boston. I had grown quite familiar with Mr. Stewart through the pages of the *FLORIST*, but had not previously met him in the flesh, my impressions—gathered from his writings—of

"A venerable gentleman  
Of staid and sober mien,"

were quite erroneous. I noticed nothing patriarchal in his appearance, and I utterly failed to discover the least solemnity in the Boston brother's manner.

I was told some time ago that Mr. Jas. Pentland was the possessor of something particularly choice in the plant line—something in fact that he didn't want to dispose of, accordingly I called on Mr. Pentland last week and was shown the plant, which is quite an acquisition. It is a seedling pandanus, on the style of *P. Veitchii* as to habit, and is also variegated, the markings being of a deep golden-yellow—it is certainly a very handsome plant, and the would-be possessors



of this novelty are legion, but for the present at least, Mr. P. declines to part with it. I was also shown four or five seedling azaleas and a new seedling camellia; the latter was very fine as to size and shape of flower which is white striped with crimson. The azaleas were all different, although produced from the same pod; a single variety, the flowers a very delicate pink, and a semi-double white were specially noticeable in this lot. I further noted during my visit the very best grown lot of verbenas I have ever seen, they were a picture of health, free from rust or mildew, and every plant had from eight to twelve strong, stocky shoots.

A. W. M.



The Black Spot.

During the past few years much attention has been paid by florists to a disease of the rose known as the "rose leaf spot" or "black spot." Upon close examination this disease is ascertained to be a fungus, and is termed *Actinonema rose* by the scientist. Apart from its scientific value this plant claims the special attention of the florist, since it produces a premature falling off of the leaves, especially of the cultivated varieties. The growth of the fungus is most rapid during cold and moist autumn weather. It thus becomes very annoying, for owing to the early falling off of the leaves, the rose falls into a premature rest, and often when the cool moist weather continues, young sprouts are put out from the upper buds of the twigs; these often perish in the winter.

In its early stage this fungus has a characteristic appearance. It first appears as a small dark brown or black spot, growing upon the upper surface of the leaf, as shown in Fig. 1, at *a*.



Fig. 1. A rose leaf, upon the surface of which are spots of the fungus, *Actinonema rose*. -*a*, the fungus as it appears in its early stage.—Original.

It grows rapidly spreading into the surrounding tissue in a dendritic manner, until the greater part of the leaf has become infested. A pale yellow zone surrounds the spot, and as the fungus develops, the zone increases, until all that part of the leaf not occupied by the fungus has assumed the yellow tinge. Upon making a vertical section of the leaf and placing it under high magnifying power, much may be ascertained concerning the true nature of the disease. The fungus is found to lie upon the epidermis, immediately underneath the cuticle. The mycelium of the young

plant, by rapid growth, forms a stratum or layer in this part of the leaf. At various points in this stratum, the spores or reproductive bodies are developed from the mycelium. They push upward in a mass against the cuticle, which soon bursts and rolls back, forming a minute ragged cup, as in Fig. 2. Many of these minute cups upon the blackened surface of the leaf causes it to present a roughened appearance.

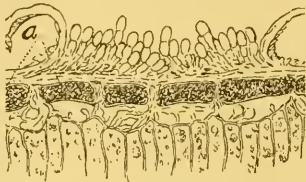


Fig. 2. Vertical section of a rose leaf, supporting the "black spot," passing through a nest or cup of spores. -1, upper epidermal cells filled with a dark brown granular substance.—x360, Original.

Shortly after reaching the surface, the spores become detached and are transported by the wind or other agents, to neighboring rose leaves where they soon germinate, and thus the disease is rapidly spread. The spores are very minute in their structure, appearing to the naked eye as dust particles. Magnified five or six hundred diameters they are shown to be oblong bodies, constricted in the middle, and are divided into two cells by a transverse partition. Fig. 3 represents these spores as they appear under the microscope.

From the layer of mycelium, lying between the cuticle and epidermis, short branches, hyphae, are sent down between the outer epidermal cells, into the tissues of the leaf, from which the fungus derives its nourishment. Thus far nothing definite has been determined concerning the character of the mycelium of this plant, and the extent to which its hyphae ramify through the leaf tissues.



The blackening of the leaf does not originate from any coloring matter in the fungus, but is due to an abnormal growth of the fungus. The epidermal cells of a mature rose leaf are divided by tangential partitions, into two, an inner and an outer cell. In the healthy, growing leaf, these cells are filled, mainly with protoplasm, chlorophyll granules and cell sap, the outer epidermal cell containing the greater amount of substance. As soon as the fungus begins its growth, the character and appearance of the contents in the outer epidermal cells, at once begin to change, while that of the inner cell is not perceptibly affected. It very rapidly assumes the appearance of a dark brown granular pigment which entirely fills the cell. This substance gives the dark color to the "black spot." Fig. 2, *a*, illustrates this growth.

Judging from its chemical reactions, its general composition, its position in the tissues of the leaf and the circumstances of its production, the assertion may be made with a good degree of certainty, that this "pigment" is an abnormal growth from the cell-contents in the

outer epidermal cells, which is induced by the action of the fungus upon this tissue of the leaf. The yellow color around the black spots is due to the death of the tissues and the breaking down of their cell contents.

Thus far all attempts of the florist to eradicate this disease, without permanently injuring the rose plant, have been futile. Being very tenacious of life, it resists the attacks of all the more common fungicides. It has been found a good preventative to keep a warm dry atmosphere not below 70° Fh., about those varieties, most easily attacked by the disease. It has been ascertained by experiment that the fungus attacks those roses most readily, which are growing in very rich, damp soil. From this it is inferred that the disease may be prevented to some extent, by placing the plants in a moderately poor soil, and furnishing them with only a sufficient amount of water for growth. A German writer, Sorauer, has suggested that, to prevent the spread of the disease, all those leaves affected should be removed and destroyed as quickly as the spots appeared upon them. There is yet much to be done by the experimental botanist or florist, in the way of discovering a cure for this the most fatal disease known to the rose.

W. S. WINDLE.

Purdue University, Lafayette, Ind.

## A Rose Remark.

The writer don't grow roses, although he sees them occasionally, but he can't refrain from giving the gist of a little discussion heard among some practical rosemen. It was to the purport that, after expensive and extensive experimenting indulged in, with several reputed "mascot" soils and mixtures, by one prominent grower, it was not Philadelphia or Nyack or Madison soil that brought the results, but work and attention. Given any good soil and then intelligent attention sixty minutes in the hour, twenty-four hours a day, and 365 days in the year, by skilled men with plenty of help, and the roses will come all right. So think Siebrecht, Harris, Farson, and so must think

KEYSTONE.

## The Fair Unknown.

We give an illustration of the tea rose now offered to cut flower growers by Mr. C. Ramsden, Morton, Pa. The blooms are in size as shown in engraving, the color a creamy white shading to yellow towards the base of the inner side of the petals, the outer petals being occasionally tinged with pink. It certainly is a handsome rose, and good judges who have seen it growing pronounce it a vigorous grower and very free bloomer.

Its name and origin are unknown, and it is—as Mr Craig has stated—probably some old variety in which merit as a winter bloomer had not been before discovered.

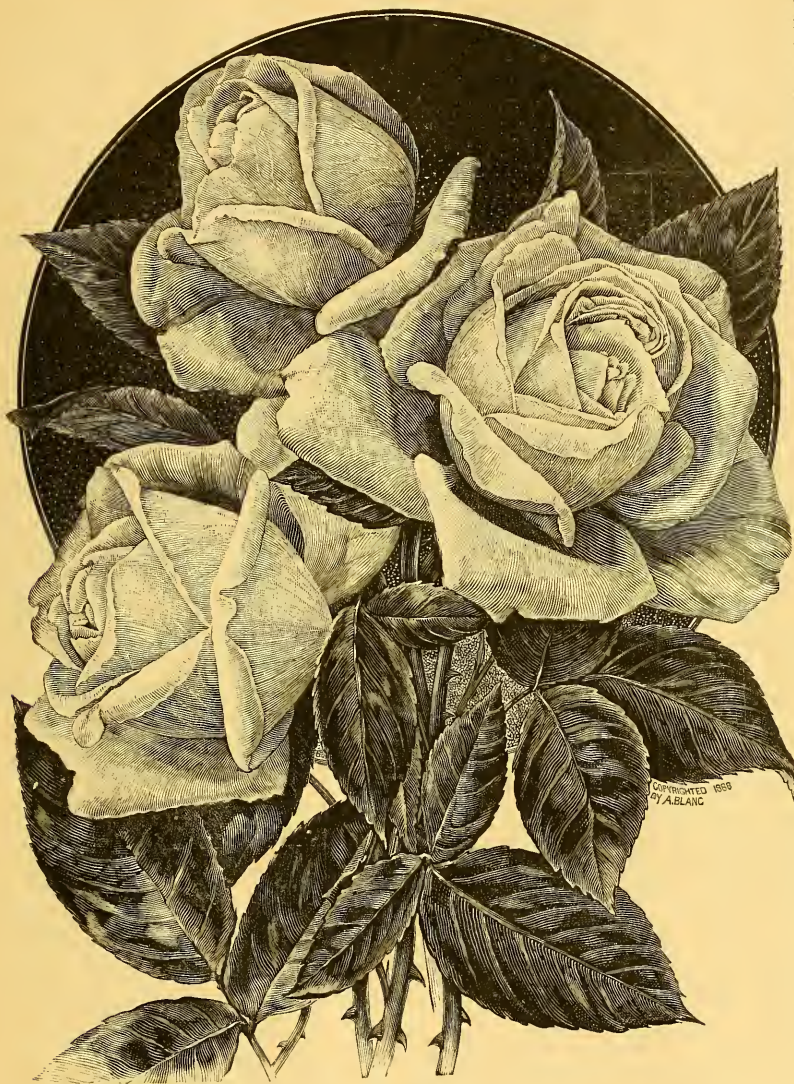
## The Puritan.

This rose has done fine with me this season and I will plant more of them. I find that if I keep the young growth cut back as soon as it starts just below the bud—which it seems bound to do with me—that my buds come out good and perfect flowers, and I can cut a stem from twelve to sixteen inches long with as fine foliage as any one could ask to see. I grow them in solid benches the same as all of my other roses as my soil is a very sandy loam.

B. W. SMITH.

West Haven, Ct.





THE FAIR UNKNOWN.

**HER MAJESTY.**—This rose was in attendance at the recent Philadelphia show but not numerously or very expansively. If I may venture an opinion, she is about sixteen times dearer than "Puritan" ever will be—the latter was out in force, and was certainly fine. KEYSTONE.

**BUDED ROSES**—Can some one tell me through the *FLORIST* whether the White Mermet, Papa Gontier or Cook will do well budded? J. W.

**A PINK MOON FLOWER.**—Mrs. J. S. R. Thomson, Spartanburg, S. C., writes that she has a pink *Ipomoea Bona nox*.

#### The Violet Disease.

The violet disease, though more or less general for the last few years, does not yet appear to have reached proportions of sufficient magnitude to influence the New York market, for the reason that during the past winter violets were never finer or more abundant, and prices obtained by growers were scarcely up to the average of former years. This would seem to indicate that growers have their own methods for counteracting the disease or else the supply comes from new and exempt locations. The experience of

some of our extensive growers of the violet would be most interesting matter for many readers of the *FLORIST*.

For the last few seasons I have found that thorough and deep culture with the hoe twice each week through the growing season outside, with an occasional dressing of air slacked lime, has brought my plants absolutely free from disease up to the time of planting them on the benches for winter flowering, and then the same continual stirring of the soil during the fall and winter seasons has always seemed to maintain a perfectly healthy condition of my plants. My practice has been to set out the plants so that a Dutch hoe can be run through them both ways, to use the hoe before the surface of the bed has time to become crusted, and when the plants begin to flower, gather twice a week and run the hoe through after each gathering. With this treatment I have never seen a diseased leaf on my plants until quite recently, when, after an abundant yield of flowers all winter the plants suddenly seemed to show a disposition to rest, and stopped flowering. The hoeing was neglected, disease set in and spread rapidly, so rapidly in fact that I determined upon throwing out the whole lot, but finally decided to try one experiment. I had the whole surface of the bed, plants and all, heavily dusted with air slacked lime, and the hoe at once put in motion. The next day the hoe was again run through each way among the plants; the effect was magical, for a new, healthy growth at once began to develop, and in a very few days the diseased foliage had entirely disappeared among the new formation of leaves which were of a rich green and perfectly healthy.

I am very strongly of opinion that with thorough and frequent culture with the hoe, and occasional timely use of air slacked lime, no person need be afraid of the violet disease, especially if these precautions are used in connection with the careful application of manure. I would advise thoroughly rotten cow manure plowed in the fall before setting out the plants, and when the plants are set for winter flowering use a little bone meal in the soil instead of soil highly enriched with manure, and never water violets over head during the winter.

At the time my plants were in their worst stage of disease, my attention was



attracted to large numbers of small spider-like insects of a bright, brownish-red color, and as I had never noticed anything of the kind before, it occurred to me that these insects might possibly be the cause of the disease, or else have something to do with it, especially as they were only found at the base of the plant and buried themselves in the earth the moment the plant was disturbed. In order to be satisfied in the matter I caught some of them and sent them with a few diseased plants to Professor C. V. Riley, entomologist to the department of agriculture at Washington, D. C. Mr. Riley soon informed me that the insects had nothing to do with the disease, and that the matter was referred to the mycologist of the department, whose communications regarding the subject I herewith submit as they may be interesting to some readers of the FLORIST.

PATERSON, N. J. H. E. CHITTY.

WASHINGTON, D. C., March 1, 1888.  
MR. H. E. CHITTY, PATERSON, N. J.

Dear Sir: Yours of the 27th ult. has come to hand. The plant arrived in good condition but the insects were not to be found in the "tight wooden box" which unfortunately had been broken in transit and had lost part of its contents. The yellow spots on the leaves are not caused by insects but by a fungus and the mycologist of the department desires greatly to receive further specimens of such infested plants. Will you therefore please try another sending of the insects putting some of them in a vial of alcohol and sending them free. Yours truly,  
C. V. RILEY, Entomologist.

WASHINGTON, D. C., March 8, 1888.  
MR. H. E. CHITTY, PATERSON, N. J.

Dear Sir: The specimens of diseased violets were received a few days ago and they have been referred to the department of vegetable pathology. The disease is caused by a minute parasitic fungus which grows in the tissue of the leaves and produces the sickly yellow spots with which you are familiar. Under favoring conditions the fungus gives rise to immense numbers of reproductive bodies which may, by close examination; be seen upon the spots in the form of blackish needle-like tufts. The reproductive bodies quickly germinate and spread the disease to adjoining plants.

As a remedy I would suggest that you remove and destroy as many of the dead or diseased leaves as possible, and then syringe the plants with a solution made by dissolving one-half an ounce of sulphide of potassium in one gallon of water. Cultivate the plants well and admit as much air as possible without endangering the health of the plants. If you use the remedy as suggested, I should be pleased to learn the result of the applications and I would also suggest that you leave a few of the plants untreated in order to test the effect of the remedy. Respectfully,  
NORMAN J. COLMAN,  
Commissioner of Agriculture.

#### Philadelphia Plant Notes.

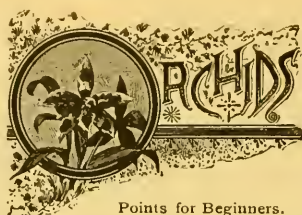
Robert Craig thinks well of the double *Ceranium White Swan*; says it is of good habit, and excellent for bedding or as a market plant.

*Abutilon Eclipse* is a cross between *A. vexillarium* and *A. Thompsonii*. It has the trailing habit of the former, but both foliage and flowers are larger and showier, and it grows very freely. It will undoubtedly be a valuable addition to our list of vase and basket plants. It is a seedling raised by James Barrows of Philadelphia.

Mr. Craig considers *Asparagus tenuissimus* about as profitable to grow as smilax—no more.

He grows *Lilium longiflorum* for Easter pot plants to bloom at any height required. A description of his method will be found in another column of this issue. He finds that it doesn't pay to keep over bulbs of *Ilarissii* or *longiflorum*, as he can buy first-class bulbs cheaper.

He says that *Alternanthera paronychioides* major should have a temperature of 75° at night continuously, and believes that a lower temperature is the cause of failure in many cases.



#### Points for Beginners.

In his very kind notice in the March 1 FLORIST, of a paper read by me before the Florists' Club of Boston, Mr. S. Taplin expressed a desire to have me go farther and tell why so many who buy orchids have so little success—it would be easier to tell how to have success. Ignorance of the needs of the plants, loss of interest after the first enthusiasm dies out, and consequent general neglect, would be fruitful causes of failure, with the novice who had no real love for orchids.

It is a common practice with those wishing to enter into the cultivation of this class of plants to attend some sale of newly imported plants, which, as such may be good sorts and in prime order; and which in the hands of an experienced grower would prove cheap, and satisfactory in other respects. But the beginner, not knowing the kinds to select, or the proper treatment to give to establish them, failure follows and he becomes discouraged. It would be much better to begin with a few established plants of good kinds, become thoroughly acquainted with their treatment, adding a few from time to time which would give increased enjoyment; for to the successful grower, orchids are certainly a most interesting class of plants.

The writer can call to mind little batches of half dead orchids—which he has seen in going the rounds—stuck up in the corner of a shelf or some out of the way place, neglected, either over watered or perpetually baked up, just as the accidental conditions under which they existed tended to have them, and which if they had been shaken out of the old material in which they were potted, and had been repotted in well drained pots with a little fresh moss, if nothing else, and set with other stove or greenhouse plants, where they would have been syringed a couple of times daily, with no extra effort on the part of the cultivator, would have made nice plants in a few months.

The simplicity of the requirements of orchids baffles the wary beginner, who feels sure that there is some mysterious way of accomplishing the business. He secures his plants, and most likely secures at the same time a lot of foreign literature on the subject in hand. A treatise on orchids, written in England for instance, and excellently adapted to the climatic conditions there, does not at all meet the case here, where one half the year we have practically a tropical climate, and the other half, the application of so much fire heat is necessary, that the result is the plants get an insufficient quantity of water at all seasons; becoming wizened up and infested with scale, and struggle for a painful existence, as it were, or die.

The plants if placed in pots should have the pots nearly filled with crocks, with a little sphagnum, or what is better—as it is coarser—Hippum moss (the kind used by florists in this section for filling wire forns), and when they are

growing should be given frequent syringings, and even when at rest should not be kept dry, with rare exceptions—for no plants, except aquatics, like such copious waterings as orchids. BENJ. GREY.  
Malden, Mass.

#### Short Notes by Wm. Falconer.

**POTTING ORCHIDS.**—In potting his orchids Mr. Fosterman raises the plants pretty well above the surface of the pot, and so that the "bulbs" and breaks shall be clear above the potting material. And he pots very firmly.

**PEAT FOR ORCHIDS.**—Mr. Fosterman likes American peat better than the English orchid peat. The English peat, although fibrous is somewhat close and earthy and too retentive of moisture, the American peat which consists of fern root sifted free from earthy matter is so open that water passes through it as fast as poured in, and it is always sweet.

**SPHAGNUM FOR ORCHIDS.**—Mr. F. uses clean fresh sphagnum and mixes it with the peat. As the plants are very freely watered the moss keeps alive and in active growth, but when it grows up a little and so as to partially bury the crown, eye or pseudo-bulb, he shears it off level with the peaty material.

**AMONG HIS RAREST ORCHIDS** now in bloom are *Angraecum* cryptodum, white and cinnamon, and sweetly fragrant. These lesser angraecums are more beautiful than the vigorous species like *A. sesquipedale*. A cattleya supposed to be a natural hybrid between *superba* and *elodorado* was also in flower. The delicious fragrance is unusually pronounced, and the color and make up of the flower and the two-leaved stem lean closely to *superba*. Among the novelties I noted was a plant of *Odontoglossum crispum* with white-margined foliage.

MR. WILLIAM DAVIDSON tells me that the finest plant of *Phalaenopsis Schilleriana* ever exhibited in New York was a specimen shown yesterday (3d inst.) by Mr. Fred Scholes, at Young & Elliott's. The specimen had twelve leaves, two flower spikes and 240 flowers. About a year ago Mr. Scholes decided to "re-pot" the plant—it was then in a cabin-basket, so he carefully removed all the old potting material he could get away without hurting the roots, and "re-potted" using sphagnum moss alone and an ox-muzzle for a basket. When growth started well, he watered copiously and occasionally gave a little liquid cow manure.

MR. FOSTERMAN, Sander's agent here, has for the last couple of years rented some of the greenhouses belonging to Mr. Edwards of Jersey City Heights, and stocked them with orchids. He has now bought some ten acres of land at Madison, N. J., and where he intends building several 100-ft. long houses this year, and thence remove his Jersey City collection. Mr. F. is a practical expert and an enthusiastic orchidist. For several years he had been employed collecting orchids in their native wilds—India, Siam, Borneo, Java, the Philippine Islands and others of the Indian Archipelago. It is a pleasure to meet such a well-informed and genial gentleman.

#### An International Race of Pansies.

With a view of making a thorough comparative trial of the various strains of pansies, we built last fall, of spare sashes, a house for the purpose of growing and testing them under equal conditions.

The house was kept cool, at a temperature of about 40° at night, so as to bring the plants in bloom without forcing, which they did gradually, getting in full bloom about April 1. Seed was procured direct from the most reputed pansy growers in England, France and Germany, with the request that, as the seed was to be used for competition, to send the best they had, regardless of cost. About a dozen or fifteen strains were so obtained and blooming now, make a display, which for quality and variety has probably never been equaled here.

Prominent above all are the French strains; Bugnot leading for choice colors and perfection of flowers, some of the shades seeming almost impossible in a pansy. Following very close are Cassier's, with very large and well formed flowers, bright coloring and of more robust habit than the former strain. These two varieties are certainly the *nee plus ultra* in pansies up to the present day. Then comes the Trimardeaux with their immense flowers, and more variety in color and better form than the original strain, when introduced five years ago. That variety, on account of its size, vigor hardiness and ability to stand the summer heat, must become the pansy for the million. Falaise and Gacqueau, other noted French strains, did not come up to the others, quite a percentage of the flowers being inferior, while in the former strains, so pure was the seed, that every flower, without exception, could be called extra. The English strains, I am sorry to say, did not come up to their former reputation, containing a very small percentage of good flowers; Laing's being best of all, Turner's quite inferior, and Bailey's of Southwick worst of all. Of the German strains, Roemer's are the best, his giant and fancy pansies are good Trimardeau and Odier.

Other strains are but fair and seem more adapted for massing than choice flowers. Cassier's seed bought in Germany at one eighth the cost of the original strain, produced a small percentage of first-class flowers, seeming to aim in producing cheaper seed, while the French strains, if very good, are very costly, having paid ourselves at the rate of \$40 per ounce for some, and considering it a favor from the grower at that. The farther those pansies are removed from the type the more it is difficult for them to produce seed, with some difference in the constitution also.

DENYS ZIRNGIEBEL.

Needham, Mass.

#### Alternantheras.

Immense quantities of these are now in the hotbeds at South Park, Chicago. Superintendent Kanst's method of securing the large quantities used in the South Park system annually differs considerably from that usually followed, and at the risk of making a repetition of some of the points involved we describe the same, which applies to all varieties except *paronychioides* major.

After the first light frost in the fall, the plants which have been in the fancy beds all summer are taken up, the tops sheared off with sheep-shears and the plants carted to the greenhouses where they are potted in 3-inch pots and placed in cool greenhouses—frequently under benches when short of room—watered once, and then kept as cool as possible—without freezing—all winter. Mr. Kanst says that many times during the winter there is some frost in the houses, though the

aim is to keep them just above that point. Great care is necessary in watering the stock when kept thus cool, as but a slight surplus of water would induce rot. He never waters them during the entire winter unless the sun runs up the temperature on bright days to such an extent that a little water is absolutely necessary. He in fact wishes to keep the plants from making any growth whatever in the houses.

In March or early in April the plants are pulled apart into five or six pieces which are potted singly into 2½-inch pots and at once placed out in hotbeds where they will make a quick vigorous growth and become fine strong plants for bedding in six weeks from the time they are separated. After they have made their growth, they are hardened by removing the sash from the beds, for about a week previous to planting out for the summer.

A *paronychioides* major is propagated by cuttings taken from the plants which have been in the fancy beds during the summer, potted three or four in a 2½-inch pot when rooted, and carried over winter in the cool houses with the other varieties. They are also separated and removed to hotbeds at the same time as the other varieties.

#### Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1887.

May 1—Tem., morning 65°, noon 72°, evening 82°. Wind south. Sunday.

2—Tem., 77, 82, 65. SW. Potted oxalis seedlings. Pricked out in frames seedling asters and dianthus. Spaded flower beds and put up vases outside.

3—Tem., 54, 65, 64. W. Repotted small tuberous begonias and gloxinias. Repotted coleus into 3-inch pots. Potted oxalis seedlings. Filled vases with soil and horn shavings.

4—Tem., 57, 62, 52. NW. Continued repotting coleus. Pricked seedling balsams out in frame.

5—Tem., 51, 54, 50. E. to NE. Planted out young carnations and chrysanthemums. Repotted ferns.

6—Tem., 52, 58, 54. E. to NE. Same as yesterday and plunged another lot of geraniums in frames. Potted *Richardia maculata* corms.

7—Tem., 52, 58, 56. N. to SE. Planted out stocks in two ribbon beds. Planted out bed of pansies and daisies. Repotted *Begonia semperflorens* rosea into 4-inch pots.

8—Tem., 48, 64, 64. SE. to E. Sunday.

9—Tem., 58, 67, 64. E. Planted another bed with pansies and daisies, and still another with *Verbena hybrida*. Continued repotting coleus. Laid four sashes of hotbeds for tuberous begonias and gloxinias.

10—Tem., 62, 67, 64. N. Plunged geraniums taken out of No. 5. Continued repotting coleus.

11—Tem., 58, 67, 58. N. Potted first lot of tuberous—fifty bulbs. Potted tuberous begonias and gloxinias into 2½-inch pots and plunged same in warm frame. Sowed another sash of hotbed with seed of annuals and pricked others in frames. Repotted achimenes into 4-inch pots.

12—Tem., 60, 64, 58. S. to N. Spread geraniums in No. 5. Shaded No. 1 with lath rollers. Took plants out of No. 1 and planted west of houses.

13—Tem., 62, 67, 60. S. to N. Same as yesterday.

14—Tem., 64, 76, 65. SE. Arranged plants—evergreens, fuchsias, etc.—on north side of houses. Pricked seedling *resedas* in pots and seedling annuals in frames.

15—Tem., 64, 62, 62. SE. to NE. Sunday.

#### The Good In Flowers.

The Brooklyn (N. Y.) Tabernacle was crowded to the doors Easter morning. The floral decorations were elaborate, and Dr. Talmage in his sermon spoke of flowers as follows:

"This morning I mean to discuss what flowers are good for. That is my subject. What are flowers good for? I remark, in the first place, they are good for lessons of God's providential care. That was Christ's first thought. If you insist on asking me the question, What are flowers good for? I respond: they are good for the bridal day. The bride must have them on her brow, and she must have them in her hand. The marriage altar must be covered with them. A wedding without flowers would be as inappropriate as a wedding without music. So much of the pathway of life is covered up with thorns we ought to cover the beginning with orange blossoms.

If you insist on asking me the question, What are flowers good for? I answer: They are good to honor and comfort the obsequies. The worst gash ever made into the side of our poor earth is the gash of the grave. It is so deep, it is so cruel, it is so incurable that it needs something to cover it up. Flowers for the casket, flowers for the hearse, flowers for the cemetery.

Oh, yes! flowers are almost human. Botanists tell us that flowers breathe, they take nourishment, they eat, they drink. They are sensitive. They have their likes and dislikes. They sleep, they wake. They live in families. They have their ancestors and their descendants, their birth, their burial, their cradle, their grave. The zephyr rocks the one and the storm digs the trench for the other. The cowslip must leave its gold, the lily must leave its silver, the rose must leave its diamond necklace of morning dew. Dust to dust. So we come up, we prosper, we spread abroad, we die, as the flower—*as the flower!*

"But, my friends, flowers have no grander use than when on Easter morning we celebrate the resurrection of Christ from the catacombs. All the flowers of to-day spell resurrection."

#### Chicago.

At the last meeting of the local club the subject of packing flowers for market was discussed. Several of the retail dealers declared that a large proportion of the flowers received were needlessly injured through careless packing. The flat paper boxes—each containing fifty blooms—now used by some of the growers for roses were recommended to those who still carry them in bulk.

Superintendent Kanst has placed good sized printed labels on every plant of any size in the conservatories at South Park, thus greatly increasing the value of the establishment as an educator of the public. Around the edge of the side benches in the palm house he has placed a row of *Selaginella denticulata* in earthen pans about six inches square. No handsomer foreground could have been devised. This *Selaginella* is not as frequently used in decorations as it should be. In table arrangements it can be used to splendid advantage and as it grows rapidly and is propagated very readily the cost is slight.

The Florists' Club has appointed committee to arrange for transportation to the annual meeting of the S. A. F. at New York in August. At the last meeting of the club two of the oldest florists in the city were elected honorary members. They were Messrs. Wm. Brooker and John Goode. Mr. Brooker is 93 years of age and is probably the oldest living florist in the U. S.

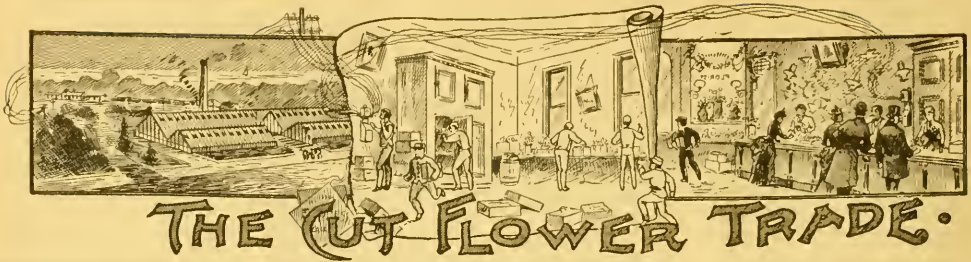
The club is making arrangements to hold a chrysanthemum show in November.











### May Floral Fashions in New York.

The profusion of flowers brought to this market privileges florists to make large effects in their decorations. Drapery of the most elegant and elaborate description has beautified the rooms where weddings and Easter entertainments have taken place, and large designs, such as floral pedestals, and high classic vases made entirely of blossoms, have produced intricate pictures that can not easily be forgotten. There is no style of arrangement that bestows more grace than the curtaining at present fashionable. The drapery formed of flowers strung on light wire can be drawn back or left to hang, and at present both ways are allowed. The curtain made for the background of a canopy is usually left to hang straight. It is formed of pink roses shaded so that from the top one side pale Mermets deepen into the Ulrich Brunner at the hem end of the other side.

The curtaining of the high Queen Anne mantels shows marked variation; on one side there will be a drapery of roses drawn back, and on the other side a smaller curtain of *Asparagus tenuissimus* left to hang loosely. The curtains made of the latter material are sometimes lined with satin, white, pink or old gold color. The strings of foliage covering this fabric are put on barely thick enough to just cover, and the effect is beautiful. When these curtains are placed high, so as to half screen music balconies, a glazed paper muslin is used for lining instead of satin. A soft finished silesia looks also very prettily when foliage covered.

One of the richest curtains made this season was for a funeral last Monday. It was composed of blue and black pansies, a single side very full and long and looped back low, with a very wide purple satin ribbon and a large cluster of violets. The casket was placed in front of this curtain, with a cross of ivy on a pedestal of foliage at the foot. The casket was covered with royal purple velvet and a wreath of lily of the valley was the only design on it. It is very fashionable to have some handsome floral effect in the background of where the casket is placed. Funeral designs are not ordered to the extent they were last season. Where "no flowers" appears in death notices, the relatives usually have some elegant arrangement in flowers in the drawing room, and only one design is taken to the grave. But memorial designs are ordered for graves every week or every month, and these are of elaborate and costly description. Plans for the decoration of cemetery plots and graves, Decoration Day, are already projected. Wreaths are more in request for caskets than ever before. These are made of one flower, such as mignonette,

pansies, or roses, and not of clusters of different flowers.

Pedestals for supporting vases, and baskets are formed of flowers or foliage and are highly ornamental. Placed in the window or on the small balconies outside of city houses, they give a delightful appearance. Those of foliage are generally used for balcony decoration, and many of these are in the form of tree trunks and are ivy bound. They are surmounted by a creel of vines, or a vase of growing pansies or daisies.

Corsage bouquets are now rarely worn in the street. They are considered too conspicuous for the prevailing taste in street costume, which is modest and quiet. Sometimes a small cluster of violets is worn, but no other flowers unless in carriage dress. Bridal bouquets are decidedly smaller and take more the form of a "bunch" than a bouquet. They are caught together and have no stiff form. Orange blossoms, white orchids, or lilacs are the favorite flowers composing them. Bridesmaid's bouquets are still large, but are very loosely tied together with ribbon. Ribbon of width and rich quality is only used by first class florists. The narrow, inferior kind put on designs some years ago would not now be tolerated.

A great deal of fruit is combined with the flowers sent in baskets to steamers. This is put in so that a nest of strawberries is surrounded with crimson roses, grapes repose on a cushion of heliotrope and bananas and oranges are shaded by daffodils and yellow roses. Hanft Bros. made up a design of fruit and flowers of this sort yesterday which was really a work of art.

FANNIE A. BENSON.

### The Commission Man.

Mr. Robert Kift's humorous paper on "How to Cut, Pack and Ship Cut Flowers" in which he ventilates the alleged "crookedness" of the growers of cut flowers, has brought out a number of replies from growers who evidently take the article as a direct drive instead of a humorous sketch. These gentlemen all make a direct "drive"—without mincing matters—at the commission dealers in cut flowers, regardless of the fact that Mr. Kift is not a commission dealer.

However, some of the statements made in regard to commission men by the writers of these letters would indicate a state of affairs which should not exist unless there are qualifying circumstances. One correspondent make some serious charges against those to whom he has consigned and says: "If one of my men in the greenhouses sold fifteen dollars worth of carnations for me and gave me ten dollars as the amount received from the sale, I would call it stealing." That would certainly be the right word under the circumstances stated, but it would

assuredly be most unjust to the man to accuse him of stealing until the fact could be fully proven that he had received more than the amount returned. There are so many circumstances which may render honest returns on consignments—especially transient ones—very small, in spite of the best efforts of the consignee, that a hasty judgment should not be formed. We never yet knew a commission man, no matter how high his reputation for integrity, who did not have a liberal allowance of "kicks" from both consignors and customers; those in the former class coming almost entirely from transient consignors.

While the AMERICAN FLORIST is always ready to lend its influence to correct any real abuse in trade transactions, it can not take cognizance of little differences between shipper and dealer. But if any consignor can prove that he has been returned a less amount than that actually received by his consignee, he has a remedy at hand in a suit for recovery, and as a commission man's main stock in trade is the confidence of consignors in his integrity he would be at once forced out of the business if such a suit against him was successful. The FLORIST stands ready to publish to the trade the name of any man convicted of dishonest dealing.

### Flowers in the Churches.

The war declared upon flowers by Bishop Whitehead, of the Episcopal diocese of Pittsburgh, has induced the *New York Herald* to interview many prominent New York clergymen and obtain their opinions on the use of flowers at church on Easter Sundays, and they were nearly unanimous in advocating appropriate floral decorations. Rev. Roderrick Terry voiced the general sentiment in these words: "I am strongly in favor of flowers. Our church always observes Easter with floral decorations. Flowers are symbols of the general joyfulness of the occasion, and I am in favor of anything that makes religion appear more joyful to people, and, therefore, I think that flowers are exceedingly appropriate in churches. I regard flowers as well as music as aids to the worship of God."

### New York Retail Prices.

Perles, Niphetos, Souvs \$1 a dozen; Contiers \$1 to \$1.50; Cusins \$1.25; Bennetts \$1.50; Mermets \$2 to \$2.50; Brides \$2.50; Bon Silences 75 cents; La France \$3 to \$5; hybrid roses 50 to 75 cents each; Auritans 40 cents each; carnations 35 to 50 cents a dozen; tulips, daffodils, Roman hyacinths, Narcissus poeticus, 75 cents; Dutch hyacinths \$1.50; callas \$2.50; pansies 25 cents; longiflorum lilies \$3; smilax 40 cents a string; violets 75 cents to \$1.50 a hundred.

**THE AMERICAN FLORIST**

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 Cents a Line, Agate;  
1 inch, \$1.40; Column \$14.00.  
Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per  
cent; 12 months, 20 per cent.

No reduction made for large space.

The Advertising Department of the AMERICAN  
FLORIST is for Florists, Seedsmen, and dealers in  
wares pertaining to these lines ONLY. Please to  
remember it.

Orders for less than one-half inch space not accepted.

17 Advertisements for May 15th issue must  
REACH US by noon, May 9. Address.

THE AMERICAN FLORIST CO., Chicago.

## Catalogues Received.

W. C. Wilsou, Astoria, Long Island  
City, N. Y., plants; A. R. Reineman &  
Bro., Pittsburg, Pa., plants; I. C. Wood  
& Bro., Fishkill, N. Y., plants; J. Gar-  
den, de Bois de Colombes, Paris, France,  
orchids; Reading Nursery, Reading,  
Mass., trees shrubs and plants.

**DRAINAGE FOR POTS.**—Clean coal ashes  
are very good for the purpose. Broken  
pots may be readily crushed to the re-  
quired size by running through a bone  
mill.

**ROMAN HYACINTHS.**—A French grower  
of these bulbs reports that the past winter  
has been the most severe experienced in  
the south of France for many years, and  
that the crop of bulbs with in consequence  
not be as large as usual. Paper White  
narcissus and Lilium candidum have also  
been injured, but to a less extent.

**A FREAK OF THE CENTURY.**—Mr. N.  
E. Baker, Lawrence, Mass., sends us two  
blooms of the Century carnation, both  
on the same stem, of which one flower is  
of normal color, while the other is one  
half carmine and the other half white.  
The division of the two colors was very dis-  
tinct, and the flower presented quite a  
striking appearance.

**PRESERVE YOUR HOT WATER PIPES.**—  
The following method of treating hot  
water pipes for the summer is recom-  
mended by an old boiler maker. Place a  
gallon of oil in the expansion tank and  
then draw off the water; as the water  
flows away it will leave a coating of the  
oil on the inside of the pipes through the  
entire system. Then refill the pipes with  
water and keep them full.

**GARDENING FOR PLEASURE.**—A new  
and enlarged edition of this well-known  
book has been published. Mr. Hender-  
son has added a great deal of new matter,  
as well as thoroughly revising the old,  
bringing the subject matter up to date.  
The volume now contains 398 pages. We  
know of no better guide for amateurs who  
wish practical information. Published by  
the O. Judd Co., New York; A. C.  
McClurg & Co., Chicago.

**BEAUTIFUL PANSIES.**—Mr. Denys Zir-  
ngiel, Needham, Mass., sends us a box  
of pansy blooms which combine large  
size and most exquisite shades of color  
to a remarkable degree. We have seen  
pansies which it seemed impossible to  
improve upon, but these leave all others  
so far behind that nothing now seems  
impossible. The flowers are of good  
substance, two and one half to three  
inches in diameter and shaded with the  
richest colors imaginable. No descrip-  
tion can do them justice.

**Wholesale Markets.****Cut Flowers.**

BOSTON, April 25.	
Roses, Teas	\$2.00
" Perles, Mermets, etc.	6.00 @ 8.00
" Jacqs	12.00 @ 16.00
Carnations, short	1.00
Carnations, long	1.50 @ 2.00
Violets	1.00
Paeonies	.25 @ .50
Smilax	25.00
Mignone	25.00
Adiantums	1.50
Valley daisies, tulips	4.00
Candidum lilies	4.00
Longiflorum	10.00
Stocks	2.00
Spirea	2.00

NEW YORK, April 25.	
Roses, Bon Silene	2.00 @ 3.00
" Perles, Niphotos	3.00 @ 4.00
" Mermets, Brides, Cousins	6.00
" La France	6.00 @ 8.00
" Bennetts	4.00
" Am. Beauty, Paritan	15.00 @ 17.00
" Jacqs	10.00 @ 12.00
Carnations	1.00 @ 1.50
Smilax	30.00
Lily of the valley, tulips	3.00 @ 4.00
Violets	.50
Narcissus, daffodils	3.00
Longiflorum lilies	6.00 @ 10.00
Callas	5.00 @ 8.00

CHICAGO, April 25.	
Roses, Teas	\$4.00 @ \$5.00
" Bon Silene	2.00 @ 4.00
" Mermets	5.00 @ 6.00
" Brides	5.00 @ 6.00
" Bennetts, Dukes	5.00 @ 7.00
" La France	5.00 @ 7.00
" Am. Beauties	15.00 @ 18.00
" Jacqs	12.00
Carnations	1.00 @ 1.50
Smilax	30.00
Lily of the valley, daffodils	4.00
Tulips	3.00 @ 4.00
Violets	.50
Callas	10.00
Adiantum ferns	1.00
Candidum lilies	6.00

PHILADELPHIA, April 25.	
Roses, Teas	\$2.00
" Perles, Niphotos	4.00
" Mermets, Bennetts	6.00
" Jacqs	10.00
" La France, Niels	8.00
" Am. Beauty, Magna	20.00
" Paritan	18.00
" Mixed hybrids	10.00
Carnations	1.00
Smilax	20.00
Lily of the valley	4.00
Carristil lilies	8.00
Candidum lilies	5.00
Double violets	.50
Callas	8.00

## WM. J. STEWART,

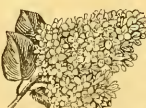
### Cut Flowers & Florists' Supplies

WHOLESALE  
67 BROMFIELD ST., BOSTON, MASS.

CHAS. E. PENNOCK,  
WHOLESALE FLORIST,  
38 So. 16TH STREET,  
PHILADELPHIA, PA.  
Mention American Florist.

CUT FLOWERS AT WHOLESALE  
N. F. MCCARTHY & CO.  
WHOLESALE FLORISTS,  
63 Bromfield St., under Hort. Hall, Boston, Mass.

We have made large contracts with the best Rose  
growers about Boston to handle their entire stock  
this season. Our stock will consist of Papa Gaudier,  
Bennett, Pierre Guillott, American Beauty, Mer-  
met, La France, Marmadon, Cook, Brides, Niphotos,  
Perle, Niel, Anna Webb and Grace Wilder pinks,  
long stems; other flowers in variety. We shall have  
a particularly large lot of Mermets and Perles, so  
that in sending to us when you fail to get them else-  
where you will feel reasonably sure of getting them.  
Unknown parties must give satisfactory reference  
or 'em us send C. O. D. Write for information.

**10,000 LILACS**

6c. per cluster or bunch.  
Discount on large orders.  
Terms cash, or flowers will  
be shipped C. O. D. Season  
generally extends from  
May 15 to June 1. Please  
order before season com-  
mences.

L. B. BRAGUE, Hinsdale, Mass.

## Thos. Young, Jr., & Co.,

### Wholesale Florists,

INCORPORATED 1885,

20 W. 24th St., NEW YORK.



W. S. ALLEN,  
WHOLESALE DEALER IN CUT FLOWERS,  
36 EAST 23rd STREET, NEW YORK.  
ESTABLISHED 1877.  
Price List sent upon application.

LaRoche & Stahl,  
Florists & Commission Merchants  
—OF—  
CUT FLOWERS.  
1237 Chestnut Street, PHILADELPHIA.  
Consignments Solicited. Special attention paid to  
shipping. Mention AMERICAN FLORIST.

C. STRAUSS & Co.,  
TELEPHONE 977. WASHINGTON, D. C.  
WHOLESALE ROSE GROWERS  
AND DEALERS.  
LARGE STOCK OF ALL THE NEW ROSES.  
Orders hooked for young stock at special rates.

GEO. MULLEN,  
17 CHAPMAN PLACE, (near Parker House),  
BOSTON, MASS.  
WHOLESALE AND COMMISSION DEALER IN  
Fresh Cut Flowers & Florists' Supplies.  
Flowers carefully packed and shipped to all points in  
Western and Middle States.  
Orders by Telegraph, Mail, Telephone or Express  
promptly attended to.

HAMMOND & HUNTER,  
Wholesale dealers in  
Cut Flowers & Florists' Supplies  
61 West 30th Street, NEW YORK.

WELCH BROS.,  
WHOLESALE FLORISTS,  
165 Tremont Street, BOSTON, MASS.  
We make a specialty of shipping choice Roses and  
other flowers, carefully packed, to all points in  
Western and Middle States.  
Return Telegram is sent immediately when it  
is impossible to fill your order.

KENNICOTT BROS.,  
WHOLESALE FLORISTS.

ALL CUT FLOWERS IN SEASON.  
Write for price list. Consignments solicited.  
27 Washington Street, CHICAGO.

CUT FLOWERS  
The choicest Cut Flowers at lowest market rates  
shipped C. O. D. Telephone connection. Use A. F.  
Code when ordering by telegraph. For prices, etc.,  
Address,  
J. L. DILLON, BLOOMSBURG, PA.

M. MALSH,  
206 S. Halsted Street, CHICAGO.  
WHOLESALE DEALER IN  
CUT FLOWERS,  
AND GROWERS' AGENT.  
Regular shipping orders especially solicited.





**M. M. BAYERSDORFER & CO.**

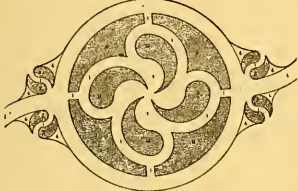
56 N. 4th St., Philadelphia, Pa.,  
Manufacturers and Importers of

**BASKETS \* AND \* FLORISTS' \* SUPPLIES.**

A large variety of Baskets for  
**COMMENCEMENTS.**

**Ed. JANSEN,**

Manufacturer of  
**NOVELTIES IN BASKETS  
FOR FLORISTS,**  
124 WEST 19TH ST., NEW YORK.  
SPRING STOCK NOW READY.



Second Edition.

**GEO. A. SOLLY & SON'S  
BOOK OF PLANS**

For

**Carpet and Ornamental Flower Beds.**  
With many it is a difficult task to lay out a carpet bed, or fancy design on the lawn, and perhaps more difficult to choose the proper plants to harmonize, so as to give the best effects. The object of these drawings is to assist gardeners and amateurs, and to enable them to choose the proper plants for their work. It is expected that this book will supply a long felt want, as it is the first and only publication entirely devoted to Fancy Flower Bed Designs.

This our **SECOND EDITION**, consists of over 100 designs, finely engraved, on good paper, nicely bound, sent prepaid to any address on receipt of Price, \$3. GEO. A. SOLLY & SON, SPRINGFIELD, MASS.

Mention American Florist.

ESTABLISHED, 1866.

**Floral Wire Designs,**

Manufactured by

**N. STEFFENS,**

335 East 21st Street, - NEW YORK.



\* **BARBED** \*

**GLAZIER \* POINTS.**

FOR SALE IN

BOSTON, MASS. . . . by Wm. J. STEWART,  
67 Bromfield Street.

PROVIDENCE, R. I. . . . .  
CHICAGO, ILL. . . . . J. C. VAUGHAN,  
146 W. Washington Street.

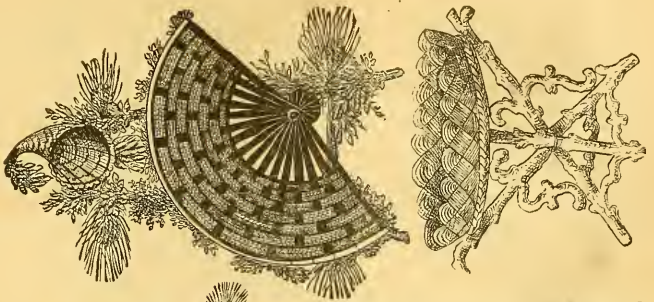
Retail at 50c. per 1,000. 5,000 will be sent by Express free on receipt of \$2.50. PINCKERS, 35c. Each.

**B. B. CHANDLER,**

Patentee and Manufacturer,

**HYDE PARK, MASS., U. S. A.**

Mention American Florist.

**CHAS. W. REIMERS**  
MANUFACTURER OF  
**FLORIST BASKETS.**

Send for Terms and Catalogue.  
329 Fourth St., - LOUISVILLE, KY.



Mention the American Florist.

**FOR THE TRADE.  
FLORAL WIRE DESIGNS.**

**JAS. GRIFFITH,**

THE : PIONEER : MANUFACTURER : IN : THE : WEST,

305 Main Street, - CINCINNATI, OHIO.

SEND FOR WHOLESALE PRICE LIST.

**HAMMOND'S "SLUG SHOT",  
GRAPE DUST, &c.**

IN LOTS TO SUIT THE TRADE.

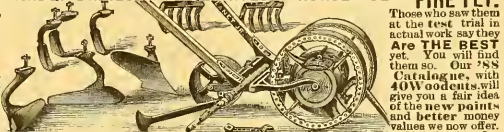
J. C. VAUGHAN, Chicago. PLANT SEED CO., St. Louis. J. M. McCULLOUGH'S SONS, Cincinnati.  
J. A. SIMMERS, Toronto, Ont. J. R. & A. MURDOCH, Pittsburg. A. W. LIVINGSTON'S SON, Columbus, O.  
And by Eastern Wholesale Seedmen.

**PLANET JR. GARDEN DRILLS. WHEEL HOES. HORSE HOES. FIRE FLY.**

Each one of these  
**POPULAR TOOLS**  
has been either

**REMOVED  
OR IMPROVED.**  
They are more complete, simple, practical and strong than you can imagine, so look them over carefully.

**NEW STYLES, NEW**



Those who saw them at the first trial in actual work say they **Are THE BEST** yet. You will find them so. Our '88 Catalogue, with 400 oddcuts, will give you a fair idea of the new points and better money values we now offer.

**PRICES. S. L. ALLEN & CO., Patentees & Mfrs., 127-129 Catharine St., Philadelphia, Pa.**

**Florist's Letters.**

PATENT APPLIED FOR.

These letters are made of the best immortelles, wired on wood or metal frames with holes to insert toothpicks.

**Prices on Wood Frames :**  
2 1/2 in. purple . . . per 100, \$3.00  
3 1/2 in. " . . . " . . . " 4.00

Send for sample. Postage 10c. per 100. Script lettering on Metal Frames any word, 2c. per letter.

Designs, Monograms, Etc.

**W. C. KRICK,**

1107 Broadway, Brooklyn, New York.

M. M. Bayersdorfer & Co., Phila. Agts. for Penna.

J. C. VAUGHAN, Chicago. Agt. West of Pennsylvania.

**Philadelphia Immortelle Design Co.,**

904 Filbert St., Philadelphia, Pa.

For **DESIGNS, WHEAT SHEAVES,**

Immortelle Letters and Baskets,

SEND TRIAL ORDER.





## Some Figures.

The figures in issue of April 15 in regard to John Henderson's roses are somewhat startling when carried out. Supposing the houses are 5,000 feet long, then it would be necessary to grow (1,000,000) one million roses in every fifty feet, and calling the width twenty feet would make every fifty feet have a floor space of 1,000 square feet; allowing nothing for alleys this would make the modest little number of 1,000 roses per square foot. Supposing Mr. Henderson gets four cents each for his roses, then his glass brings him \$40 per foot, or \$4,000,000 for two and one-third acres of glass.

L. B. P.

[Of course our readers understood that the item was inserted only as a specimen of the Brooklyn Times' reporter's ability in handling large figures. The average newspaper reporter always has a liberal allowance of ciphers to add on to the business end of every row of numerals he makes use of.—Ed.]

## Summer Flowering BULBS.



Per 100  
Amaryllis Formosissima..... \$5 00  
Cycladum Esculentum..... 6 00  
Cooperia Pedunculata..... 5 00

### GLADIOLUS

#### CHOICE NAMED VARIETIES.

Our Selection..... 10 00  
Very good Standard named varieties..... 6 00  
Mixed Reds and Scutellars..... 1 50  
" Pink and variegated..... 2 00  
" Whites and light shades..... 3 00  
" Yellows..... 4 00  
New American Hybrids mixed..... 2 00  
Good mixed, all shades.... 1 50

#### HYACINTHUS CANDICANS.

\$5 00 per hundred.

RICHARDIA (SPOTTED CALLA),  
\$6 00 per hundred;

Extra strong, \$10 00 per hundred

**MICHEL PLANT AND SEED CO.**  
718 Olive Street,  
ST. LOUIS, MO.

Mention American Florist.

## DUTCH BULBS!

G. V. VAN ZANTEN & CO.,  
WHOLESALE BULB GROWERS,  
Hillegom, Haarlem, Holland.

ESTABLISHED 1862.

Our stocks are selected with the greatest care for the American trade.

Price list free on application—before ordering write for one.



## IMPORT BULB PRICES.

We are Large Dealers in all

## FORCING BULBS.

And ask the opportunity to make prices on your list.

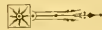
Please write us for Estimates now.

**J. G. VAUGHAN,** <sup>80X</sup><sub>688</sub> CHICAGO.

**WE ARE NOW BOOKING ORDERS FOR  
HYACINTHS, TULIPS, Single and Double NARCISSUS, Etc.  
SEEDSMEN AND FLORISTS**

Importing direct write us for prices. Special rates to large buyers. Largest stock of

*Hyacinths, Tulips, Polyanthus, Single and Double Narcissus, Narcissus Bicolor  
Horsfieldi, Poets Ornatus, Trumpet Major, Double Von Sion.*



**R. VAN DER SCHOOT & SON,**

Bulb Growers,

HILLEGOM, near Haarlem, HOLLAND



## LAWN GRASS SEED

Neatly put up in pound and half pound boxes for florists' retailing. PRICES, \$2.25 and \$1.25 per doz. pkts., or in bulk at \$2.00 per bushel.

**LILY AURATUM, DAHLIAS,**

—) AND ALL SPRING BULBS. (—)

Choice Seeds for MARKET GARDENERS' and FLORISTS' use.

Send for Catalogue and Trade List.

**JAMES KING.**

170 Lake St. CHICAGO.



TRADE MARK.

**POLMAN MOOY,**

WHOLESALE ONLY.

Largest growers of

**DUTCH BULBS,**

**HAARLEM,  
HOLLAND.**

NO AGENTS.

Hyacinths, Tulips, Crocus, Narcissus, Ranunculus, Anemones, Lillium, Spirea, Lily of the Valley, Dielytra.

HEADQUARTERS FOR FORCING BULBS.

The only warehouses facing the waterside with all the latest improvements for packing, drying and export.

**PRICES LOW.**

**DUTCH BULBS, ROMAN HYACINTHS,**

*Lilium Candidum and Harrisii, Freesias, Paper White Narcissus, etc.*

From the BOSKOP HOLLAND NURSERY ASSOCIATION, **HARDY LOW BUDDED DWARF**

**ROSES, TREE ROSES, RHODODENDRONS, Azaleas, Lilacs, Hydrangeas;**

**EXTRA STRONG CLEMATIS, ETC., ETC.**

Catalogues for Fall Importation now ready.

ADDRESS:

**C. H. JOOSTEN, Importer,**

43 Coenties Slip, NEW YORK.

10,000

**ECHEVERIAS SECUNDA GLAUCA**

Per hundred, \$3.00.

CHARLES HEINZ, SHARON, PA.

**CLEMATIS.**

Per 100  
Nice 2 year old Viticella Clematis..... \$ 6.00  
Nice 2 year old Flammula Clematis..... 6.00  
Strong 1 year layers of Clematis Virginica..... 6.00  
D. LEE & SON, Madison, Lake Co., Ohio







# A Grand Winter Flowering Tea Rose.

## ORIGIN UNKNOWN. CALLED BY US "THE GEM."

A Special Prize was awarded this Rose for being a Rose of special value, and worthy of merit, at the Penn. Hort. Society's spring show, April, '88.

It is a Rose larger in size than the Perle des Jardins, fragrant, of good habit, a vigorous grower, and a very free bloomer. The color is creamy white, shading richer towards the center; the outer petals are occasionally tinged with pink.

We have tested this Rose thoroughly the past two winters, and have no hesitation in recommending it as a Rose that florists can grow with satisfaction and **PROFIT**.

Good judges who have seen this Rose growing pronounce it First-Class.

### READ WHAT IS SAID ABOUT THIS ROSE BY MEN WHO HAVE SEEN IT:

*Dear Sir:*—After having seen your Rose growing, I would say it is a Rose in size about like *Mermet* or *Bride*, and being a strong grower and free bloomer, that it will prove quite an addition as a florist's rose.

Yours truly,

PHILADELPHIA, March 17, 1888.

JOHN WESCOTT, of PENNOCK BROS.

PHILADELPHIA, March 17, 1888.

CRAIG & BRO.

*Dear Sir:*—We are pleased with your Rose, and shall plant at least five hundred for our own use.

Yours truly,

SUMMIT, N. J., April 5, 1888.

*Dear Sir:*—Having carefully examined the Rose you have now to offer, I consider it a very fine Rose for winter cut flower work, but consider it as undecided what variety it can be.

JOHN N. MAY.

*Dear Sir:*—Having to-day seen your Rose for the first time I should consider it a first class Rose for florists use, being rather larger than a *Perle*, of good, robust habit, of pale lemon color with a slight pink tinge on the outside petals; resembles *Marie Van Houtte*, but as seen at your place finer than I have ever seen that variety.

WEST HOBOKEN, N. J., April 5, 1888.

ERNEST ASMUS.

Strong, healthy plants in 2-inch pots, will be ready June 1, 1888, at \$25.00 per 100. Send for full descriptive circular.

## C. RAMSDEN, Agent,

P. S.—THIS IS THE ROSE WE OFFERED IN APRIL 1ST ISSUE UNDER THE NAME OF "THE GEM."

MORTON, PA.

### SPRING SALES OF BEDDING PLANTS, ETC.,

## AT AUCTION

Every Wednesday and Saturday at 10 a. m. beginning May 2 and ending June 16, 1888.

Any one wishing to consign plants to our sales can send by freight and notify us. We will take proper care of them. RATES OF COMMISSION 12½ per cent. for selling and three per cent. for advertising. References, any of the Florists about Boston.

We shall have from 1,000 to 2,000 SNOWDON and ANNA WEBB Carnation plants in first-class condition at every sale held during the Spring. Persons attending our sales can feel assured of finding a full line of everything the market affords.

## N. F. MCCARTHY & CO., Auctioneers,

Address of Auction Room, cor. Congress and Franklin.

63 Bromfield St. BOSTON, MASS.

### BOUYARDIA PLANTS, FOR SPRING SETTING.

DAVIDSON, White; ELEGANS, Salmon Pink;  
PRRS, GARFIELD, PINK; ALFRED  
REUBEN, Double White.

Strong, Healthy Plants ready May, 1st, at \$4.00 per 100. Cash with order.

SAMUEL NICHOLS,  
COHASSET, MASS.

### PLANTS.

Bouyardia, single white and scarlet, double  
white and pink, from 2-inch pots.....\$ 3.00  
Geraniums, from 2-inch pots..... 3.00  
" " 4-inch pots..... 5.00  
" " 4-inch pots, in bud and bloom 7.00  
Passiflora, best blooming var., fine large plants 15.00  
Moon Flower, 2 1/2 inch pots, \$1.00, 4-inch pots... 8.00  
Pearl Tuberosa Bulbs, from 3-inch in circumference up, per 1000, \$5.00.

Pearl Tuberosa Sets and small bulbs, per bush. 2.00  
Trade List now ready, mailed on application.

A. R. REINEMAN & BRO.,

39 Fifth Ave., PITTSBURGH, PA.

### HUDSON RIVER VIOLETS. MARIA LOUISE.

ROOTED CUTTINGS, ready May 15, at \$2.00 per 100.  
Or plants grown on upland or muck at market rates, or by contract. Free on board. Ready Sept. or Oct. Have never had any disease in my stock.  
References as to healthy plants, etc.,  
JAMES HART, 117 West 30th St., New York.  
or W. S. ALLEN, 36 E. 23d St., New York.  
Call on or address

S. L. WILSON, Florist,  
P. O. Box 219. NEWBURGH, N. Y.  
Mention American Florist.

### TUBEROSE BULBS.

LARGE, DOUBLE-FLOWERING, TALL.

12 sent by mail for.....\$ .50  
100 by express for..... 2.00  
1,000 by express or freight..... 20.00  
5,000 by express or freight..... 25.00  
100 sets by mail for..... .50  
10,000 sets by express for..... 10.00

ADDRESS HENRY GULICK,  
SUMMIT, FLORIDA.

### ASTERS FOR CUT BLOOMS.

PEARL, BOSTON MARKET, VICTORIA.  
Whites, Large Double, Blue and Pink Shades.

Well rooted, stocky plants twice reset, per 100 \$1.00, per 1,000 \$1.50. All manner of fine flower seedlings by the 10,000. Write for varieties and low prices.

DANIEL K. HERR, Lancaster, Pa.  
Mention American Florist.

### EVERGREENS.

Arbor Vitae Compacta, 6 to 8 inches.....\$ 4.00  
" " 10 to 12 "..... 8.00  
" " 18 to 24 "..... 15.00  
" " 30 to 48 "..... 25.00  
" " 6 to 10 inches..... 4.00  
" " 1 to 2 feet..... 6.00  
" " 3 to 3 1/2 feet..... 15.00  
All transplanted and full. 10 at 100 rates.

I. C. WOOD & BRO., Fishkill, N. Y.  
Mention American Florist.



## Indianapolis.

The committee of arrangements for the next chrysanthemum show of the Society of Indiana Florists met at Lafayette recently, and an advance sheet of the premium list was arranged and issued. The full list will be issued in June. The committee appointed to visit Purdue University were taken to that institution by Mr. Fred Dornier and were cordially received by Mr. Valandigham the florist. The two greenhouses were packed with specimen plants of all kinds, also many interesting seedlings were noted. Mr. Valandigham is experimenting with a view to find a remedy for "black spot." President Stuart assured the committee that the floral department would receive a fair share of the government appropriation. Mr. Valandigham has been made florist for the new department, which will be separate from the university proper, and he is the right man for the place.

The local club has issued a price list of bedding plants for the spring trade, and all members have signed the same except one small florist; it is not made compulsory, but is to equalize prices and for the information of people who find things "so much cheaper at the other place."

Mr. Chas. Rieman is still confined to his bed, only slightly better.

A. Wiegand and Ed. Corneli have been burning natural gas for several weeks and are delighted with it.

The local seedsmen are busy as bees and report business much better than ever before.

W. B.



E wish to call the attention of florists to our stock of young

## \* ROSES \*

AND—

## \* CARNATIONS. \*

We also offer a large stock of acclimated

## RHODODENDRONS

grow one year in this country and well set with bloom-buds. These plants are in perfect health and condition and will prove satisfactory.

We also have a large stock of Musa Ensete and other desirable plants. Send us a list of your needs and will give you low prices.

B. A. ELLIOTT CO.,

PITTSBURG, PA.

## CARNATIONS.

## ROOTED CUTTINGS

## HINZE'S WHITE AND DE GRAW

\$1.00 per hundred.

Special rates per 1,000 for April on above and other varieties. Fine transplanted plants low.

Rooted Cuttings of J. Gonde Coleus, Verbenas, etc., at prices which it will pay you to get before placing your orders.

PANSIES—Wintered plants from cold frames, superb strains, line plants \$1.75 per 100, \$15.00 per 1000. DE GRAW, surplus, will sell fine transplanted plants at \$7.50 per thousand.

ALBERT M. HERR,

LOCK BOX 338. LANCASTER, PA.

## \* NEW WHITE CARNATIONS \*

WYM. SWAYNE AND L. L. LAMBORN.

The two best white carnations ever offered. EARLY, FREE AND CONTINUOUS BLOOMERS. Stock of these excellent sorts will be ready March 1st, 1888. Orders booked now, and filled strictly in rotation as received, Price, \$25.00 per 100.

Send for Cut and Descriptive List.

SWANLEY WHITE and MARIE LOUISE VIOLETS, free from disease, \$5 per 100.

WILLIAM SWAYNE, Kennett Square, Pa.

**ROSES FOR FORCING.** GROWN FROM THOROUGHLY RIPEATED FINE-GROWN PLANTS LA FRANCE, MAD. DE FIFTTE LIL, NINET PAPA GONTIER, BRIDE, BON SILENE, MAGNA CHARTA, GEN. JACQUEMINOT, AND OTHER POPULAR VARIETIES IN LARGE SUPPLY. SEND YOUR LISTS AND HAVE THEM PRICED.

SPECIAL QUOTATIONS IN LARGE LOTS.

Address

THE DINGEE &amp; CONARD CO.,

ROSE GROWERS, WEST GROVE, PA.

## WE HAVE

## FINE PLANTS OF THE FOLLOWING

ROSES	Per 100
Malmesbury, Sombriant, The Bride, Mad. Alex.	
Hermes	\$ 5.00
Alfred de Roumont, La Reine, Annie de Diesbach, Con de Blanches, Henry Martin, Mermel, Saffron, White Bon Silene, Bon Silene, Cimon, La Fictole, Souv. de Chas. Montaut, and fifty other good varieties.	
First size \$5.00 per hundred, second size	3.00
Geraniums, in 20 varieties	3.50
Bismarck, Holly Wreath, L' Elegante, Mad. Saleroi, White Duet, etc.	4.00
Rose geraniums and Schrubland Pet.	4.50
Hellebore, 3 varieties	2.50
Fuchsias and Lantanas	3.00
Carnations, Sunrise, De Graw, Hinze's White, Petunia and Hindsdale	2.00
Alternantheras and Ageratum	3.00
Honey suckles, Halliana, Aurea Reticulata	3.50
Chrysanthemums, 3 varieties	4.00
Coleus, Golden Beller and Verschaffeltii	2.00
10 market sorts	2.50
Begonias, Rubra, R. Alba and Sandersoni	3.00
Cobea Scandens	3.00
Vines	3.00
Pasifloras, Cuscuta Elliott, Smithii, Tripartata and Floridii	4.00
Address GEO. THOMPSON & SON, Louisville, Ky.	

## Carnations and Rooted Cuttings

## OUT OF SAND BED.

	Per 100
Batterup and Sunrise	\$3.50
Grace Wilder, Grace Fardon and Spring	2.50
Chester Pride, Lady Emma, Edwards, Peter Henderson, Philadelphia Red, La Purite, scarlet Gem, Black Knight, etc.	2.00
Snowdon and Crimson King	1.50
Century and several others	2.50
In 2-inch pots, \$1.00 per 100 extra.	

ISAAC LARKIN, Toughkenamon, Pa.

## CARNATION

## HINZE'S WHITE.

25,000 from sand bench, in first-class condition by April 1. \$10.00 per thousand.  
Emperor of Morocco, same colors as long rose, and Louise Schiller, the best pink for long stems, \$2.00 per hundred. Ask for sample flowers.

SCHILLER &amp; MAILANDER,

NILES CENTRE, COOK CO., ILL.

## SMILAX FOR EASTER

IN QUANTITY FOR THE TRADE.

STORM KING FUCHSIA—Well rooted Cuttings, \$3.00 per 100, as good as pot plants.

FUCHSIA PHENOMINAL—\$6.00 per 100, or will exchange for Chrysanthemums and Geraniums of some varieties, and dbl. Abut. Thompson.

F. E. FASSETT &amp; BRO.,

Ashtabula, O.

## PANSIES AND COLEUS

## BY THE THOUSAND.

	Per 100 Per 1000
PANSIES, from 2-inch pots	\$2.00 \$15.00
transplanted	1.50 10.00
COLEUS, including Verschaffeltii and Golden Beller	2.00 15.00
BEGONIA METALLICA, good plants	4.00 30.00

J. W. DUDLEY &amp; SON, Parkersburg, W. Va.

## MARIE LOUISE VIOLET.

Grown from fall runners, and wintered in cold frame. No old crowns, \$2.00 per hundred; \$15.00 per thousand.

W. DAVISON,

P. O. Box 505. NYACK, NEW YORK.

## NEW BEGONIA

Semperflorens Gigantea Rosea,

\$8.00 per 100, \$70.00 per 1000.

## BEGONIA RUBRA

\$4.00 per 100, \$35.00 per 1000.

## ROSE, HERMOSA,

CLEAN, STRONG 2-inch PLANTS, \$5.00 per 100, \$45.00 per 1000.

## GERANIUMS.

HAPPY THOUGHT, \$3.50 per 100, \$30.00 per 1000.

MT. OF SNOW..... per 100, \$4.00

MAD. SALEROI..... " 4.00

## WILSON BROS.,

SPRINGFIELD, O.

## CUT THIS OUT.

CARNATIONS, ROOTED CUTTINGS.

	Per 100 Per 1000
Pres. DeGraw	1.25 10.00
Crimson King	1.25 10.00
Philadelphia	1.25 10.00
Grace Wilder	1.50 10.00
Robert Craig	1.50 10.00
Hinze's White	1.50 10.00
Sunrise	1.50 10.00
P. Henderson	1.50 10.00
Chester Pride	1.50 10.00

## ALTERNANTHERAS

Tricolor	1.00 8.00
Versicolor	1.00 8.00
Aurea Nana	1.00 8.00
Aurea Spectabilis	1.00 8.00

## COLEUS, 2½-Inch Pots.

Verschaffeltii	2.50
J. Gonde	2.50
Firebrand	2.50
Ten other varieties	2.50
LANTANAS, 8 best kinds	3.00
FT. CHAS. 10 best market sorts, double and single	5.00

10,000 Black Walnut, 2 to 6 ft.	
10,000 Silver Maple, 1 to 10 ft.	
Globe Arbor Vitae, 2½ by 2½ ft.	
Siberian " " from 2 to 2½ ft.	
Compa " " " " " "	
Irish Juniper, 3½ to 4 ft.	

✓ Prices on Application.

W. J. CHINNICK, Trenton, N. J.

Mention American Florist.

NOW IS THE TIME TO INVEST IN THIS VALUABLE CUT FLOWER CHRYSANTHEMUM

## "CHRISTMAS EVE."

Several thousand nice plants, \$1.00 per hundred \$30.00 per thousand.

CHESTER FLORAL CO., (Lim.)

CHESTER, PA.

## ORCHIDS.

HARDY AND EXOTIC.

Stock immense; quality superb; prices moderate. Catalogue on receipt of stamp.

CANE STAKES.	Best Orchid and Plant Stakes in the market.	
6 feet long, per 1,000	.....	\$4.00
3 " " "	.....	2.00
18 inches long	.....	1.50
12 " " "	.....	1.00

BRACKENRIDGE & CO.,

GOVANSTOWN, Baltimore Co., MD.

ESTABLISHED 1854.

††††

††††

Mention American Florist.

MANY ADDITIONS

— TO MY —

## ORCHID STOCK

this Spring. Send for Catalogue.

WM. MATHWEYS,

UTICA, N. Y.

## ORCHIDS.

Best and Largest Stock in New England to Cut.

Collection 12 distinct free sorts, \$12.00 to \$25.00.  
Collection 25 distinct free sorts, \$25.00 to \$50.00.

All healthy, established plants.

SEND FOR LIST.

BENJ. GREY, Malden, Mass.

## ORCHIDS A SPECIALTY.

The Stock at the Clapton Nursery is not of such magnitude that without seeing it is not easy to form an adequate conception of its unprecedented extent.

Coleus, Roses, Fruit Trees, Ornamental Leaved and Flowering Plants, also

GENERAL NURSERY STOCK

Of fine quality and immense extent.

The Glass Structures cover an area of 257,300 feet.

HUGH LOW & CO.,

Clapton Nursery, LONDON, ENGLAND.

## CHRYSANTHEMUMS.

We have a fine stock of the new French and English varieties. There are many exceptionally fine sorts in this collection.

## \* CHRYSANTHYMUMS \*

Our stock of the new varieties of last year is large and healthy. There is not a florist in the country who grows Chrysanthemums who can afford to be without them.

## CHRYSANTHEMUMS.

An exceedingly large and fine list of older varieties. Can supply 100 in two varieties; or by 1,000 or 10,000. PRICE VERY LOW.

Address all orders to

W. P. SIMMONS & CO.

GENEVA, OHIO.

Mention American Florist.

## FLOWER SEEDS.

SOW NOW

For Propagating and Cutting during the Summer.

ASTER SEEDS, CROP 1887.

TRUFFAUTS PRIZE STRAIN.	Pkt. oz.	
Pure white	.....	\$50 \$3.00
Bright pink	.....	50 3.50
Brilliant scarlet	.....	50 3.50
Blue	.....	50 3.50
Violet and purple	.....	50 3.50
Mixed, all colors	.....	50 3.00

BALSAM PERFECTION, pure white, ext. dbl. 50 2.00  
For a complete list see Dreer's April List of Seeds and Plants for the trade. Mailed FREE.

HENRY A. DREER,

714 Chestnut Street, PHILADELPHIA.

## ORCHIDS AND PALMS.

NEW AND RARE PLANTS.

New Catalogue ready May 1st.

RARE OFFERS:

6 Fine Orchid Plants, established and growing, all different, at	\$10.00.
12 " " " twelve distinct sorts	20.00.
Single plants of the Collection	2.50.
6 Palms, best varieties, fine plants	5.00.
12 " and other choice foliage plants	10.00.

A PREMIUM WILL BE SENT WITH EVERY ORDER OF \$10.00 AND OVER.

SIEBRECHT & WADLEY,

Largest Collection of Orchids and Palms in America.

409 Fifth Ave., NEW YORK.

YOU CAN'T get better printing anywhere than I send you, and there are few places where as much practical knowledge of plants, bulbs, seeds and trees is stirred in with the printing. The mixture gives accurate, intelligent work in my specialty, which is printing for nurserymen, florists and seedsmen. Try me for anything you need. Good catalogues assured; lots of handsome cuts here.

J. HORACE MCFARLAND, Harrisburg, Pa.

Contracts made now for Fall Delivery 1888

Japanese Lily Bulbs

California Lily Bulbs

Japanese Seeds,

Conifers, Palms

Trees, Shrubs,

and Bamboos.

H. H. BERGER & CO., 315 & 317 Washington Street,  
SAN FRANCISCO, CALIFORNIA.  
Send for Estimates. Established 1878.

PLANTS, SEEDS AND BULBS

## FINK & CO.

Postoffice Box 484,

City of Mexico.

## COLEUS.

If you are in need of any

COLEUS, PANSIES, OR OTHER BEDDING PLANTS

In large quantities, write for lowest prices.

ADDRESS

BRENNEMAN & PETTERSON,  
Harrisburg, Pa.

## BEDDING PLANTS.

The Northwestern Trade Supplied.

C. A. SMITH FLORAL CO.,

624 NICOLLET AVE.,  
Greenhouses, 3501 Portland Ave.,  
MINNEAPOLIS, MINN.

ANY OF THE TRADE

who have not received our Descriptive Catalogue

— OF —

EVERYTHING FOR THE GARDEN,

Our Wholesale List for

Market Gardeners and Truckers,

Or our Wholesale List for

FLORISTS.

Can obtain them free of charge by stating that they saw this advertisement in the American Florist.

PETER HENDERSON & CO.,

35 and 37 Cortlandt Street, NEW YORK.

Mention American Florist.

## TUBEROSE \* BULBS.

MIXED HALF ITALIAN AND HALF PEARLS.

	Per 100	Per 1000
3-inch to 4-inch, double	.....	\$ 1.00 3.00
3½-inch to 6-inch, double	.....	1.50 10.00

Orders will be entered and filled in rotation until the lot is sold.

H. M. HOFFMAN,

LEAVENWORTH KAN.

FOR SALE. FALL DELIVERY.

50,000

AZALEA INDICA AND CAMELLIAS.

For Catalogues, address

C. H. JOOSTEN,

Importer of Bulbs and Plants.

3 Centes Slip, NEW YORK.

A. BLANC.

ENGRAVER for FLORISTS,

Philadelphia.

\* \* \*

Catalogue of  
electros of plant,  
flowers, designs,  
etc., with '97 and  
'98 supplements,  
55 cts., with vegetable  
table, 30 cents,  
which deduct  
from first order.

Electro of  
this cut,  
\$1.50



## FOR FLORISTS.

	Per 100	Per 1000
Coleus, 20 varieties	.....	\$ 4.00
Geraniums, 3-inch pots, in bud	.....	10.00
" " " 3-inch pots	.....	4.00
Roses, 3-inch pots, fine	.....	12.00
" " " 2-inch pots	.....	5.00
Achyranthes, 3-inch pots, 6 varieties	.....	4.00
Chrysanthemums, 3-inch pots, 60 var.	.....	5.00
Verbena, 3-inch pots, 12 var.	.....	3.00
Lobelia, 3-inch pots	.....	4.00
Golden Everfew, 2-inch pots	.....	4.00
Veronica, Maria Louise, 3-inch pots	.....	4.00
Carnations, 2-inch pots, 6 var., strong	.....	4.00
Single Peonias, 2½-inch pots, good var.	.....	4.00
Echeverias in boxes	.....	5.00
Heliotropes, 2-inch pots, 8 var.	.....	4.00
Miniature, 4-inch pots, in bloom	.....	10.00

The above stock in fine, healthy condition, and can be used for immediate sales. Any number of plants may be taken at above quotations, providing you take nothing less than one dozen.

GEO. W. MILLER,

WRIGHT'S GROVE, CHICAGO.

Mention American Florist

Double Fringed Petunia,

A splendid stock of the best varieties at low rates, also Zonal Pelargoniums, Hibiscus, etc. all choice, named sorts. Will exchange some for other stock.

HARKETT'S FLORAL NURSERY,

Dubuque, Iowa



## New York.

Florists located in fashionable districts are doing a brisk business, but there is a complaint of dull times by those situated off of the chief thoroughfares.

There is a glut of *Lilium longiflorum*, which has sold wholesale for remarkably low prices.

Landscapers' orders are coming in freely, and those who attend to this branch of business are now making trips to suburban estates.

The seed business in this city is booming beyond all precedent, one house employing over seventy hands has been obliged to work until midnight the past eight weeks to keep up with orders.

The shop windows of seedsmen this spring are laid out in many kinds of pastoral pictures. Lawns, flowers, pastures and devices to display agricultural implements, attract the attention of pedestrians.

There is an obvious decline in making estimates on projected decorations. Some of our leading florists decline to give figures for detail. They set their price and agree to make a handsome arrangement for that money.

ONLY POTTERY MAKING A SPECIALTY OF

## FLOWER POTS FOR FLORISTS.

THE WHILLDIN POTTERY CO.,  
713 & 715 WHARTON ST.,  
PHILADELPHIA.

## SYRACUSE POTTERY CO.

Sells Flower Pots by the crate only, and ships all over the U. S. Try a crate. Samples in first crate.

PRICES PER CRATE, CASH WITH ORDER.			
3,150 Thumbs,	\$8.00;	875 3½-inch,	\$5.50;
2,625 2½-inch,	8.00;	600 4-inch,	4.75;
1,875 3½-inch,	7.25;	300 4½-inch,	3.50;
1,300 special 3½-in.,	6.00;	320 5-inch,	4.40;
1,150 3-inch,	5.50;	100 6-inch,	5.50;

A crate weighs 400 lbs. and goes at buyer's risk and frt. Our frt. rate to Pittsburgh or Cleveland is 60c; to Boston, Detroit or Columbus 60c; to New York and Philadelphia points 50c. Send for frt. rates and prices of assorted sizes packed in crate to order, and of 17 ready packed crates.

J. N. PERKINS, Manager, Syracuse, N. Y.

## D. C. SCHOFIELD,

— MANUFACTURER OF —

## Improved \* Greenhouse \* FLOWER POTS \*

NEW BRIGHTON, PA.,

Offers to the Trade the BEST

Quality of Improved Shoulder Pot  
in the market at the

LOWEST PRICES EVER OFFERED.

SEND FOR PRICE LIST.

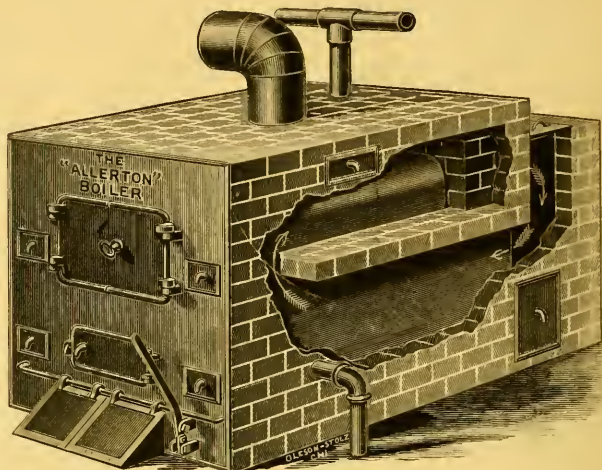
Orders will receive prompt and careful attention and satisfaction is warranted in every respect.

## HAND TURNED EARTHEN WARE

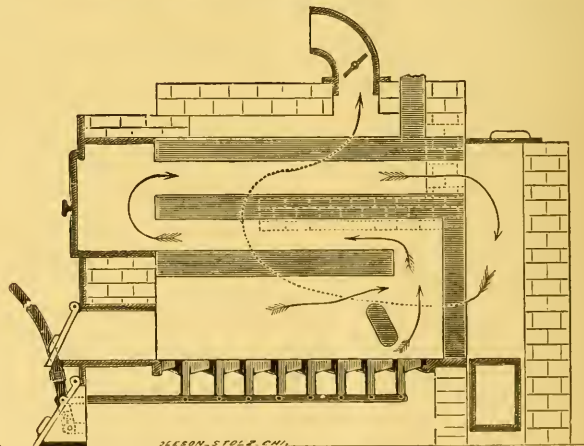
Price List for 1888.			
2½-inch ... per 100, \$	50	6-inch ... per 100, \$	5.50
3½-inch ... "	63	8-inch ... "	6.75
4-inch ... "	88	10-inch ... "	8.00
5-inch ... "	1.38	12-inch ... "	23.50
6-inch ... "	2.20	14-inch ... "	50.00
7-inch ... "	2.75	16-inch ... "	100.00

No charges for package or cartage. Send \$1.00 for sample barrel before purchasing elsewhere. All florists will find it to their advantage to do so, as we make the best and strongest ware in the market. Terms cash. Address all communications to HILFINGER BROS., Port Edward, N. Y.

## WROUGHT WELDED BOILERS FOR GREENHOUSE HEATING.



BRICK SET.



SECTIONAL VIEW.

SEVEN PATTERNS. 44 SIZES.

Our Wrought Welded Boilers are the most SIMPLE, RELIABLE and DURABLE WATER BOILERS in existence. The plates are solidly welded together, the heads are welded into the shells and the flues welded into the heads, thus the entire boiler is without Seams, Joints or Rivets. They will expand and contract without any risk of fracture, and making them red hot will not cause leakage.

Generally, and almost without exception, other boilers are over-rated from 30 to 50 per cent., while the rated capacity of our boilers is CONSIDERABLY WITHIN their actual working power.

28 PRIZE MEDALS AWARDED DURING THE LAST 12 YEARS.

Numbers of Testimonials prove this boiler to be THE BEST in the market for Greenhouse Heating.

ADDRESS

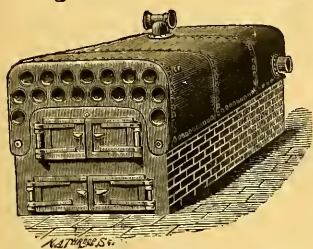
THE ECLIPSE MFG COMPANY,  
CHICAGO.

ESTABLISHED 1854.

Devine's Boiler Works

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers.



Capacity from 350 to 10,000 feet of four-inch pipe.

Send for New List.

PETER DEVINE,

387 S. CANAL ST.,

CHICAGO.

Ives' Putty Machine.

Patented Jan. 8, 1887.

The best device ever invented for laying putty. With this you can make old leaky sash perfectly tight without removing the glass. It will do the work of five men in bedding glass.

Send by Express on receipt of price, \$3.00.

J. H. IVES, DANBURY, CONN.

HALES' MOLE TRAP

For destroying ground moles in lawns, parks, gardens and cemeteries. The only PERFECT mole trap in existence. Guaranteed to catch moles where all other traps fail. Sold by seedsmen, Agricultural Implement and Hardware dealers, or sent by express on receipt of \$2.40 by H. W. HALES, RIDGEWOOD N. J.

Conservatories

GREENHOUSES, ETC.

Erected in any part of the U. S. or Canada Glazed on the

Helliwell Pat. Imperishable System

OR WITH PUTTY.

For further testimonials, illustrated catalogue or estimates address

JOSEPHUS PLENTY.

HOPCULTURAL AND SKYLIGHT WORKS.

Offices, 144 Pearl Street, NEW YORK.

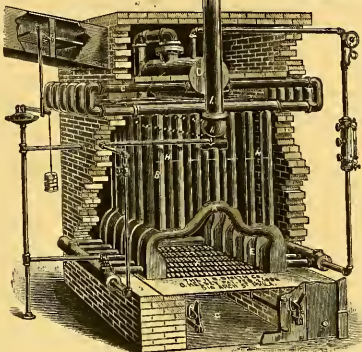
HOT BED SASH. VENTILATORS. WRITE FOR PRICES.

SASH IN FULL SIZE OF PINE OR CYPRESS. WE CARRY A FULL STOCK OF 12 14 and 16 foot lengths.

JOHN L. DIEZ & CO., 530 No. Halsted Street. CHICAGO.

GURNEY

HOT WATER HEATER



THE FURMAN STEAM HEATER

REDUCE YOUR COAL BILLS

IMPROVED GLAZING.

J. M. Gasser's Patent Zinc Joints,

For butting glass without laps; makes it air and water tight; saves fuel and glass. No breakage from frost. Also the best improved fuel oil burners for steam boilers. Will send plate by mail.

J. M. GASSER,

101 Euclid Avenue, CLEVELAND, O.

SASH BARS

VENTILATORS, RIDGES, GUTTERING AND LUMBER.

NO WIDE-AWAKE FLORIST need be told it will pay him to use Sash Bars, etc. made from

CLEAR CYPRESS.

Bars all Shapes up to 20 feet long.

Send for circulars and estimates.

LOCKLAND LUMBER CO.,

LOCKLAND, HAMILTON Co., OHIO.

FOR HEATING

Private Dwellings, Public Buildings, Offices, Conservatories, Etc.

HOT WATER CIRCULATION.

THE GURNEY HEATER is the best, most economical and durable. Seven sizes. Quickly set up; requires no brick work; does not corrode or rust out. Saves, 25 per cent. in Fuel. Noiseless in Operation. No Danger of Explosion. Even Temperature.

Our new INSTRUCTION Book will be sent gratis to any address, also to ARCHITECTS and FITTERS upon application. Also price list.

GURNEY HOT WATER HEATER CO. 237 Franklin St., BOSTON.

WORKS AT EAST BOSTON, MASS.

SELLING AGENCIES—M. H. Johnson, 140 Centre St., N. Y.; Rice & Whitacre Mfg. Co., 42 and 44 W. Monroe St., Chicago, Ill.; T. R. Chase, 31 Edmund Place, Detroit, Mich.; William Gardiner & Co., Portland, Oregon; J. L. Frisbie, 536 Phila. St., Covington, Ky. It pays to do work early.

ESTABLISHED 1853.

THE

O. K. STEAM GENERATOR

Is especially adapted to warming GREENHOUSES, GRAPERIES AND CONSERVATORIES.

Special features insure Economy, Simplicity, Durability,

Giving best results with least labor and fuel.

SEND FOR DESCRIPTION.

THE H. B. SMITH CO.,

510 Arch Street, PHILADELPHIA, PA.

Mention American Florist.

REDUCE YOUR COAL BILLS

THE FURMAN STEAM HEATER

ESPECIALLY ADAPTED FOR WARMING GREENHOUSES.

Gives a most uniform heat night and day. Can be run with less attention, and a SAVING of fully 20 to 25 Per Cent. in Fuel over any other method. Burns HARD or SOFT COAL. Endorsed by leading florists. Send for full illustrated Catalogue, Address HERENDEN MANUFACTURING CO., GENEVA, N. Y.

IMPROVED GLAZING.

J. M. Gasser's Patent Zinc Joints,

PIPE AND FITTINGS FURNISHED

TO—

PLANS AND SPECIFICATIONS.

Contracts solicited for HEATING GREENHOUSES.

Most improved plans.

ALL WORK GUARANTEED.

Prices furnished on application.

E. A. STIMSON & CO.,

No. 22 and 24 Sears Street, DAYTON, OHIO.

GOLDMAN'S ATOMIZER

FOR A THOUSAND AND ONE USES.

COMMENT UNNECESSARY

Practical and Useful.

You will not part with it.

For Flowers, Window Gardening, House Plants, Destroying Insects, and for various fine sprays. Most natural substitute for fog or dew. By dipping in water while closed, fills instantly. Bell finely perforated spray controlled by pressure of hand. Size of lemon squeezer. Weight, 5 oz. Exclusive Territory to Agents. Sold on its own merits; no talk. Sample by mail, 50 cts. This is the Atomizer that sold so well at the Danbury, Albany and other fairs. Florists and Seedsmen, show it to your customers; sells fast; good profit. Excellent for indoor plants. Send for illustrated pamphlet and price to the trade. Mention this paper.

M. GOLDMUN, Manufacturer, Pittsfield, Mass.



## Index to Advertisers.

Advertising Rates, etc.	431	Kennelott Bros.	431
Allen, C. E.	432	King, James.	434
Allen, S. L. & Co.	433	Kralage, E. H. & Son	435
Allen, W. S.	431	Krick, W. G.	433
American Garden.	432	Larkin, Isaac.	438
Bailey, F. A.	432	La Roche & Stahl.	431
Bachmardier, M. M. & Co.	433	Lee, L. & Son	434
Bar.	433	Lockland Lumber Co.	431
Benard, E.	432	Loose, Jno. L.	432
Berger, H. H. & Co.	439	Low Huch & Co.	439
Blanc, A.	439	McAllister, F. B.	435
Bonsall, Jos. E.	436	McCurdy, N. F. & Co.	437
Boyson, Jas. L.	439	McFarland J. Horace.	439
Brackenridge & Co.	439	McFarland, G. A.	432
Brague, L. B.	431	Mish, M.	431
Breneman & Petter-son.	439	Mathews, Wm.	439
Brown, Holt, S. & Son	436	Mayer, J.	439
Burrows, J. G.	432	Merrick, A. T.	433
Carmody, J. H.	432	Michel Plant Seed Co	434
Chandler, B. B.	433	Miller, Geo. W.	439
Chester Floral Co.	438	Monon Route.	435
Chinnick, W. J.	438	Moon, Samuel C.	435
Chipman Bros.	436	Mount, Edman.	434
Clark Bros.	432	Morat, Edw.	439
Coles, W. W.	436	Millen, Geo.	431
Conk, J.	439	Myers & Co.	437
Cranio, A. H.	435	Nanz & Neumer.	439
Currie Bros.	439	Nichols, S. L.	437
Curwen, John Jr.	432	Pennock, Chas. E.	431
Davison, W.	438	Perkins, J. N.	440
Deamond, Wm.	436	Phelps, H. L.	436
De Veer, J. A.	435	Phila. Im. Design Co.	433
Devine, Peter.	441	Plenty, Josephus.	431
Diez, John L.	441	Quaker City Mch. Wks	432
Dillon, J. L.	431, 435	Ramsden, C.	437
Dingee & Conard Co.	439, 438	Reed & Keller.	433
Dreer, H. A.	432, 433, 439	Reiners, Chas. W.	435
Dundley, J. W. & Son.	438	Reineman A. R. & Bro.	437
Edgemo, M. G.	439	Rogner, Frederick.	432
Eiselle, W. A.	439	Roller, A. & Sons.	435
Elliot, B. A. Co.	438	Schiller & Mailander.	438
Fassett, F. E. & Bro.	438	Schlegel & Feller.	435
Faxon, M. B.	432	Schofield, D. C.	430
Fink & Co.	439	Schulz, Jacob.	439
Fischer, John C.	432	Searcy, John A.	432
Garden & Forest.	432	Segers Bros.	439
Gasser, J. M.	441	Siebrecht & Windley.	439
Giddings, A.	436	Simmons V. P. & Co.	439
Goldman, M.	441	Situations, Wants etc.	438
Grey, Benj.	436, 439	Smith Floral Co.	439
Grimm, Jas.	433	Smith, H. B. Co.	431
Grimith, N. S.	436	Solly, Geo. A. & Sons.	433
Gulick, Henry.	437	Spooner, Wm. H.	438
Gurney Heater Co.	441	Stedens, N.	433
Hales, H. W.	441	Stewart, Wm. J.	431
Hallock, V. H. & Son.	435	Stimson, E. A. & Co.	431
Hammond, Benj.	433	Strauss, C. & Co.	431
Hammond & Hunter.	431	Studer, N.	436
Hart, W. A.	439	Sweeney, Wm.	438
Harold, Thos. G.	432	Tapin, James.	436
Helm, Chas.	434	Temple, J. T.	432
Henderson, P. & Co.	439	Thompson, G. & Son.	438
Hendrick, James.	439	Tucker, A. C.	432
Heredendy Mfr. Co.	441	Tuttle, Sidney, & Co.	439
Herr, Albert M.	438	Uecke Bros.	435
Herr, Dan E. K.	437	Van der Schoot & Son.	431
Higley, Henry G.	432	Vanhan, J. C.	431, 434, 436
Hilfinger Bros.	440	Van Zanten, G. V. & Co.	434
Hitchings & Co.	442	Ware, Thos. S.	438
Hoffman, H. M.	432	Weathered, Thos. W.	431
Hooker, H. M.	432	Weich Bros.	434
Hunkins, L. D. C.	432	Whilldin Pottery Co.	440
Hutschens Bros.	433	Wilks, S. Mfg. Co.	442
Hurt, Freeman.	432	Wilson, S. L.	438
Ives, J. H.	433	Wilson Bros.	438
Janson, Ed.	433	Wright, C. & Bro.	437
Joosten, C. H.	434, 439	Young, Thos. Jr. & Co.	431
Kauletz, J.	439	Zirngiebel, D.	435

OUR NEW TRADE  
DIRECTORY

Contains over

6,000 Names of (Live)

Florists, nurserymen and seedsmen, in the United

States and Canada.

PRICE ONLY ONE DOLLAR.

AMERICAN FLORIST CO., Chicago.

GREENHOUSE HEATING  
AND VENTILATING.

Superior Hot Water Boilers.

JOHN A. SCOLLY,

74 &amp; 76 Myrtle Ave., Brooklyn, N. Y.

Send for Catalogue.

## SOMETHING NEW

- IN -

## Heating Apparatus

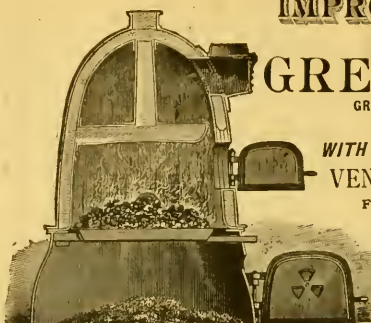
- FOR -

## GREENHOUSES.

Send for Illustrated Catalogue.

J. D. CARMODY,

EVANSVILLE, IND.



Sectional View.

## IMPROVED BOILERS

FOR HEATING

## GREENHOUSES

GRAPERIES, POULTRY-HOUSES, ETC.

ALSO FOR HEATING

WITH HOT WATER UNDER PRESSURE.

## VENTILATING APPARATUS

For Raising Sashes in Greenhouses.

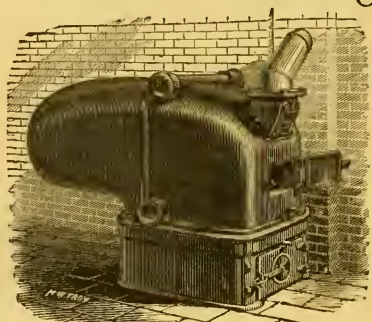
## GALVANIZED SCREW EYES

And Wire for Trellis Work.

Send for Catalogue.

Thos. W. Weathered,  
46 & 48 MARION ST., N. Y.Greenhouse Heating AND Ventilating  
HITCHINGS & CO.

233 Mercer Street, New York.



Send 4 cents postage for Illustrated Catalogue.

## Improved Hot Water Boilers

For Heating

## Greenhouses, Graperies,

CONSERVATORIES, ETC.

ALSO

Cast Iron Pipe, Fittings, Valves and

all Material for Heating by

Hot Water.

Send for Catalogue.

## MYERS &amp; CO.

1173 So. 9th St.,

PHILADELPHIA.



ALL SIZES OF SINGLE AND DOUBLE THICK

## GLASS FOR GREENHOUSES.

ALL GLAZIERS' SUPPLIES.

Write for Latest Prices.

Mention American Florist.

THE CELEBRATED  
WILKS WATER HEATER!

For Heating

GREENHOUSES,

DWELLINGS,

POULTRY HOUSES,

STORES, BATH TUBS,

ETC., ETC.

Send for Price List.



S. Wilks Mfg. Co.,

Cor. Monroe &amp; Clinton Sts., Chicago

# THE AMERICAN FLORIST



America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. III.

CHICAGO AND NEW YORK, MAY 15, 1888.

No. 67.

## THE AMERICAN FLORIST

Copyright, 1887, by American Florist Company  
Entered as Second-class Mail matter.

Published on the 1st and 15th of each month by

THE AMERICAN FLORIST COMPANY.

GENERAL OFFICES, 54 La Salle Street, Chicago.

EASTERN OFFICE,

Room 81, Vanderbilt Building, New York.

All communications should be addressed to the  
general office at Chicago.

SOCIETY OF AMERICAN FLORISTS.—E. G. Hill, Richmond, Ind., president; John N. May, Summit, N. J., vice-president; M. A. Hunt, Terre Haute, Ind., treasurer; Wm. J. Stewart, 67 Bromfield street, Boston, Mass., secretary. The fourth annual meeting at New York, August 21, 22, 23, 1888.

**THE NEW YORK MEETING.**—It is not too early for the various florists' organizations to take action in regard to attending the annual meeting of the S. A. F. at New York in August. A committee should be appointed to secure the names of those who intend to go and to make such arrangements that the delegation may travel in a body. A suitable club badge should also be provided. The New York meeting promises to be a larger and more interesting one than any yet held by the national society, and all who can possibly do so should attend. Make arrangements now to that end. A rate of one and one-third fare for the round trip is already assured and even better rates may be secured before the time of meeting.

**THE SPRING PLANT TRADE** is at hand and all who do a general florists' business will now be called upon by all their customers who decorate their grounds—each one wanting his orders filled first. The problem of how to simultaneously deliver seven different orders in as many different directions with only one or two delivery wagons will again present itself, and be as far from a solution as before. The woman who wants a bed with a diameter of ten feet filled with geraniums for a compensation of 50 cents, and her sister who buys a 15 cent plant and wants it delivered free to her home, some three miles away, will again call upon their favorite victim. But the good orders are sandwiched in between and the sum total of receipts will probably exceed that of last year, so we keep at work and make hay while the sun shines. May the weather be favorable, good orders plentiful, stock good and pockets be well filled before the season passes.

**SAVANNAH, GA.**—The spring exhibition of the Floral and Art Association was held April 17-19. A handsome display was made, though not as large as last year. Roses were the principal flowers exhibited.

### Primrose Day in England.

It may be an interesting fact to the readers of the AMERICAN FLORIST to know that the United States is not the only nation that observes a day in which flowers play a prominent part. The 19th of April is known all over Great Britain as "Primrose day," and although it has a political significance the writer has noticed that it is observed by all parties. The 19th of April is the anniversary of the death of one of England's greatest statesmen, Lord Beaconsfield. The primrose was said to be his favorite flower and many say that he wore a bunch in his buttonhole whenever they were procurable; from this has sprung up primrose day and it is estimated that nine out of ten people in England wore primroses on this day.

The primrose mentioned here is the common English primrose or *Primula vulgaris*. It grows wild in the fields and along by the edges, and is certainly a most beautiful flower. The peculiar yellow color and the fresh green leaves all tend to make it a general favorite, in the early spring when one appreciates anything that is fresh and young. It is estimated that many tons of this flower are sold in London alone on primrose day. The writer made a careful estimate of those that wore primroses in their buttonholes and found that over 90 per cent had this flower displayed. So universal has this habit become here on primrose day that even the coachmen on the carriages wore immense bouquets, they also had them on their whips, on the horse's ears and on the carriage lamps. This custom is not confined to the higher classes, but rich and poor all combine to honor the memory of England's greatest statesman.

The large bronze statue of Lord Beaconsfield opposite Westminster Abbey was one mass of primroses sent by his admirers from all parts of the kingdom. A large wreath over eight feet in diameter was sent by the primrose league (a political organization) and many more wreaths and thousands of bouquets were placed on and around it. The marble statue of Lord Beaconsfield in Westminster Abbey was also profusely decorated with primroses. Crowds all day visited these places and many of those that wore primroses threw them on the ground around the statues.

The primrose is certainly a beautiful flower and it seems to me that it is worthy of notice and cultivation by the American florists. To be sure the climate here is milder in winter and colder in summer, but I am quite sure that any smart American florist can overcome these difficulties. From our observations both at home and abroad, we think it would be a profitable speculation for some enterprising florist to import a

number of roots and grow and sell the primrose in America. The writer never saw them before he visited England and in these days of "Anglophobia" they would be sure to sell.

Lord Beaconsfield was the leader of the conservative party in England and from his love for the primrose it has become the badge of this political party. Many would be quite surprised at the cheapness of this flower here. They sell for a penny (two cents) a bunch of about twenty-five flowers. On primrose day they were sold all over by men, women and children and in all the writer's experience he has never seen any one article so universally bought and sold as the English primroses on primrose day.

London, April 28.

W. H. S. T.

### New York Notes and Comments.

A New Jersey grower whose carnations are a grand success says that there is no special secret of culture; he just plants them out in beds and lets them grow. But they are vigorous well-grown plants when brought into houses, and this is a most important point. The cuttings are struck in November, the young plants are put in the open ground about the end of April, and attain full growth outside; such plants have little chance of becoming diseased. A very good scarlet carnations, deserving to rank with E. G. Hill, is *Alegatiere*. It is very vigorous and free-flowering, not fringed, but a shapely flower, lively scarlet in hue. *Andalusia* is certainly one of the prettiest yellow carnations; its clear sulphur color is more attractive than the bi-color of our old friend Buttercup. A good many of the wholesale men seem very fond of handling striped or variegated carnations, finding the self-colored ones more generally marketable, though there must be a certain demand for the former. Mrs. Carnegie is a very attractive one, white striped with bright pink.

A very usual general utility yellow flower is the "Paris daisy" *Etoile d'Or*. It flowers profusely when other chrysanthemums are out of season, and is especially useful to out-of-town florists with a general local trade. The flowers pay well at a dollar a hundred, and both yellow and white varieties are always popular, especially at the school commencement season.

A goodly number of our growers say that they intend doubling their present extent of Papa Gontier the coming season; fair test of its popularity. Countess de Frigneuse does not yet show signs of supplanting Perle, even where the latter has behaved badly; yet Frigneuse is pretty enough. But mere prettiness does not make a trade rose.

Very fine lilac now coming into the market is from Washington, D. C.—out



of doors of course. This was preceded by a crop from southern Virginia. The dealers declare that it is chiefly difficult to buy this lilac; it is chiefly grown by non-professionals, and they do not like to part with it. However, the coming crop will be from the vicinity of New York; it will be followed by a crop from New England, where the season is later than with us.

There are comparatively few good hybrids coming in now, a complaint we usually hear at this season. An epidemic of short stemmed Jacqs, which are useless except in baskets.

The first wild flowers are to be seen in the stores, as well as on the streets. Trailing arbutus, which real flower lovers are sorry to see, for it is torn up wholesale, roots and all, and grows more restricted in quantity every year. The combined effects of forest fires, botanical students and mercenary flower collectors work havoc among many of our choicest wild plants; pity they don't confine their depredations to Canada thistles and field daisies. The marsh buttercups come in from the New Jersey swamps by the bushel; they make a very spring-like corsage bunch. The bright weather causes a very extensive outbreak in this line; every one wears a bunch or breast-knot of flowers except those exclusive dames who are afraid of compromising their social standing by appearing in the same adornment as their less wealthy sisters. Lily of the valley is very largely used, partly because it is very plentiful, and partly because it harmonizes so well with the new spring colors.

Siebrecht & Wadley are still engaged in building at Rose Hill Nurseries. They are building a large potting shed 175 feet long, extending the length of the greenhouses. The present shed, connecting the houses, is to be turned into a show house, for exhibiting specimens in bloom. It will be something like a glass roofed corridor, and will be capable of very picturesque arrangement.

Naturally one hears many complaints of the dull season among the retail florists; the steamer trade is good, and there is a fair amount of bedding, but apart from this the season seems duller than previous years.

Every one wants some effective insecticide, and one grower gives kerosene emulsion as his particular vanity in this line. The formula is as follows: ten ounces whale oil soap, one quart water, two quarts kerosene. Boil the soap in the water until it is thoroughly dissolved; then stir in the oil. It will be taken up entirely by the soap and water, forming a complete mixture. Use one part of the solution to ten of water. It is very effective when used against scale; the constructor of it says that it will remove that thread-like black scale which sticks closer than a brother to most of the palms imported from the European nurseries. So far, however, I have seen nothing that will kill this particular brand of scale without killing the plants too.

Good white carnations are uncommonly plentiful; we see as much of Hinz's White as any variety, but Mlle. Carle seems likely to become a favorite.

It is noticeable that the Bennett will develop well with less light than any other rose, a fact to bear in mind when planting. It is a good dull weather rose.

EMILY LOUISE TAPLIN.

#### A Roland for Your Oliver.

I am delighted with Mr. May's lively review of my article, it gives it a value that it did not before possess. Something in the vivisection line is it not? But I don't intend that Mr. May shall have a walk-round, it is an indifferent question that has not two sides, I have known some that had three.

Greenhouses are built every season that are practically air-tight whenever it is cold enough to cause a deposit of frost on the under side of the glass. I mean that they are as nearly air-tight as ordinary sleeping rooms are, some air gets in around windows and doors but they are none the less unventilated rooms, and it is to the occupancy of such through the long winter nights that physicians attribute that dread disease consumption, and that with but one or two persons in them. Let them be crowded with human beings as a plant house is with plants and their condition after twelve or fifteen



SPRING FLOWER FAVOR.

hours can be left to the imagination. I claim that under similar conditions plants must suffer. Where large sized glass is used the ventilation is much better. As greenhouses become old and dilapidated they become leaky, plenty of air gets in and it is the general belief that much better plants can then be grown in them than could before. A belief that is amply confirmed by my own observation.

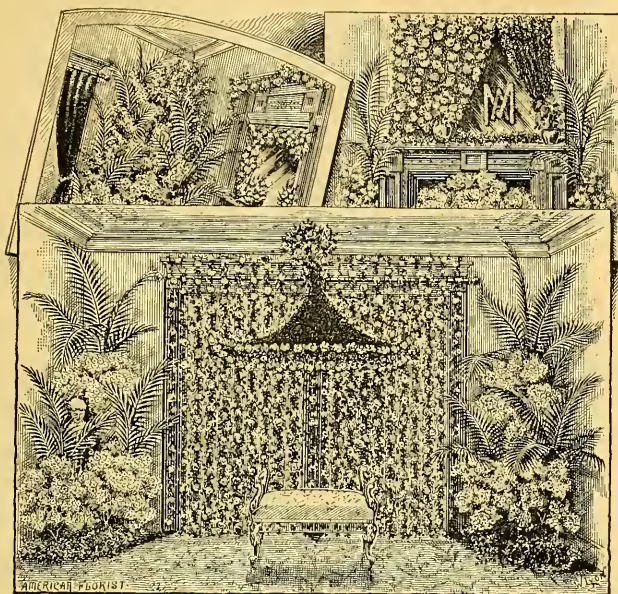
As to dew on plants, Mr. May does not catch my idea, the very point I made was that dew was out of the question in houses as now heated and ventilated, and I expressed a hope that improved methods would render a nearer approach to nature's ways possible. At this point Mr. May states most emphatically the fact that the conditions under glass are diametrically opposed to those outside; further on he seems to resent my stating the same fact. Mr. May's allusion to his cucumber experience is unfortunate. There is no difficulty in growing cucumbers without bottom heat; the most successful grower in this neighborhood grows in solid beds, and would not have bottom heat under any circumstances. I did not say that few florists raise good flowers because they use bottom heat, or anything like it. As to the quality of the flowers during the winter months, there is a small supply of first class flowers, a fair supply of good flowers and a large supply of poor ones. I think that this implies that the general conditions of growth must be very adverse, and that is what I said. I think that heating on a mistaken principle has something to do with it.

Mr. May is quite correct in supposing that if the super-heating of the soil is prevented it will not become super-heated, and plants will not suffer from that cause. As to ventilating at the top, the objection is not of course to that, but to the way in which it is done. It may be called the cataract system, permitting icy air to fall in columns, small or large, upon the plants below. This method has always been considered as a great defect, and the strongest argument in favor of steam heating is that temperature can be controlled without incessant resort to these large ventilators. Many large forcers of vegetables have thrown out hot water and put in steam for that reason and no other.

As to following nature, I might content myself with Mr. May's frank avowal that conditions under glass are entirely different from those outside, that is from the natural condition, and simply ask why not make an attempt at a closer imitation; but this question is worth looking into. In an article upon rose culture Mr. May says, "Till cool nights come, air should be given night and day." Why should air be cut off when cool nights come? What has happened that roses which have been grown under natural conditions, with plenty of air day and night, should suddenly have their night supply of air cut off? This is not following nature. The fact is that with our present system of heating and ventilating night air in adequate supply is impossible so far as roses are concerned. With other plants, carnations for instance, it is different. And night air is beginning to be recognized as a necessity, some growers leaving air on in the coldest nights, burning enough coal to keep up the temperature. Now fresh air is just as necessary to roses at night as to carnations though it cannot be admitted in the same way. I have no doubt that the present methods of forcing roses are the very best under the circumstances. When pipes are placed under benches containing five or six inches of soil, the soil will dry at the bottom of the benches first, and excessive watering will be necessary to keep the bottom of the bench in proper condition; this fact has led to the reducing of the depth of soil to three or four inches only. Mr. May advises "nice September weather" as the correct thing for winter flowering of roses. It is popularly supposed that June and early July is the time when we get our best results in the way of flowers. If P's north, and teas in their own latitude; and June is as different from September as well can be. Then we have this condition of affairs: A plant is grown as an annual which is naturally at its best in its second year and after; it is grown in three or four inches of soil when it naturally requires a deep and well worked soil; it is given a September climate when for profusion of bloom it naturally prefers a June and July climate; it is deprived of adequate ventilation at night when it demands "the open winds of the universe." The moisture is dried out of the bottom of the benches when it is naturally rapidly evaporated from the surface; the heat rises up in volumes against the under side of the leaves while naturally the heat pours down from above striking the upper side of the leaves, which are designed to receive both heat and light. Here is nature with a vengeance!

If Mr. May will take the trouble to read about that battle-field once more he will see that he has not quoted me cor-





WEDDING DECORATION ARRANGED BY KLUNDER, NEW YORK.

rectly either in word or sense; if he will reread what I said about higher night temperature he will see that an imperative condition is attached to which he does not allude. It is impossible to properly discuss the question of heating and ventilating in a single article. It is the heart and soul of the whole business.

Of course Mr. May never intended it, but I cannot but regret that the tone of his article should seem to imply that a degree of perfection has been reached which it is presumptions to question. We must question everything. Nature offers no opinion, no advice, and unless we question we shall remain ignorant. It would be much more creditable to the intelligence and energy of the florist community to detect the weak points of our present methods by analysis, and apply scientific remedies than to wait till some lucky blunder puts us in possession of a new fact which we ought to have reasoned out long before. Is it not possible that Mr. May is not a fair judge of these things? In every walk of life there are men born to command success in spite of every obstacle. A man who sees nothing but molehills cannot understand why others should call them mountains. Mr. May can be pardoned for not fully appreciating obstacles which to him are not obstacles. If he would contrive now and then to achieve one of those brilliant and inexplicable failures which distinguish the career of the average florist he would view with more sympathy the attempts of others to stir up the accepted order of things in hopes that something useful might find its way to the top. L. W.

#### Wedding Decoration.

This was arranged by Klunder of New York. The sketch in the upper left

hand corner shows the corner of the corridor; also the mirror of hat stand, the latter being trimmed with yellow tulips, with a garland of pink roses above. The plants in the corner are genista and palms, with a grouping of azaleas below.

On the right hand side the sketch represents the fireplace and large mirror above. One curtain draping the mirror is composed of pink roses, and the smaller one is made of smilax. The mantel is bedded with smilax, and there are end vases filled with pink and white roses. There are flame colored azaleas filling the fireplace and snow balls and palms each side.

The main picture shows the end of the drawing-room where a double window is curtained with vines and roses. A bracket projects from the center of the window which supports a Japanese canopy made of smilax and lined with Bride roses. It is edged with Puritan roses. The side groupings are azaleas and palms.

#### Spring Flower Favor.

The basket which is very shallow is willow, very neatly finished and French imported. It is now the most fashionable favor for dinners, lawn parties and cotillions. It is filled with lilies one side and with pansies, daisies mignonettes and tulips the other side. The handle is trimmed with foliage and a spray of roses one side. The one illustrated was arranged by Hanft Bros., New York.

#### Pittsburg.

The new houses of John R. & A. Murdoch on Forbes street are good examples of the best methods in modern greenhouse building and heating. The range

at present consists of four houses, each 150 feet long. They run parallel with the street and a large space is left open between the houses and the street for an effective display of lawn, flower-beds, shrubbery, etc. In the rear there is space reserved for extensive additions in the near future.

The location was selected with a view to perfect drainage, is conveniently reached, and the soil is well adapted to rose culture. No. 1 house is planted with smilax in the center, and the side benches are now filled with young pot roses, *Ficus elastica*, etc., for spring trade, a crop of carnations having been taken off them earlier in the season. No. 2 is a very successful propagating house. No. 3 is divided into two sections, one part for tropical decorative plants, and a part for roses on benches. No. 4 is devoted to roses on benches exclusively and they are doing finely. The houses are built separate, with the exception of the propagating house, which is close to the palm house to enjoy its shade. The houses all open into one large well lighted potting and packing room, with an office and gardener's house connected.

The whole establishment is heated by steam from one horizontal No. 2 flue boiler. Natural gas is the only fuel used. This gas also furnishes light for illuminating office, house, sheds and boiler cellar. Water is supplied from the city mains at a pressure of twenty pounds.

S.

#### Baltimore Odds and Ends.

In the FLORIST of April 1, brief reference is made to a lecture given by Bishop Whitehead of Pittsburg, and in which the good churchman denounced the use of flowers at funerals and in the churches at Easter. Concerning the decoration of churches at Easter, the custom is certainly growing—and properly so—it is an occasion which affords the florist peculiar opportunities for "spreading" himself, and so thoroughly does he do this, that, once a year at least, Bishop Whitehead enjoys the privilege of addressing hundreds of people, who under ordinary circumstances, would probably never come within reach of his eloquence. Such men as the Bishop, if in proper harmony with their work, ought rather to encourage the use of flowers, for no teacher of morality could possibly desire more susceptible hearers than those who are inspired with a genuine love for flowers; and indeed, methinks men could scarcely introduce more appropriate emblems into their worship of the Great Creator, than the pure and beautiful flowers, with which that Creator has clothed the earth.

At the meeting of the Florist Club held April 4, we had with us Messrs. May, Lonsdale and Asmus. The trio didn't take up very much room, and they wouldn't have occupied the floor either, to any great extent, had they been left to follow their own inclinations, every one acquainted with Mr. Lonsdale knows how very modest and retiring he is, and in this respect the three gentlemen were apparently "birds of a feather"—however we succeeded in making their visit pleasant(?) for them, and instructive to ourselves. During a discussion as to the cause of "bull-head" Perles. Mr. May won our confidence by telling us frankly that he couldn't grow Perle without getting 35 per cent. of them deformed; he did not consider it a question of temperature, having found "bull-heads" quite



as prevalent in a temperature of 70° as in a house kept at 50° or 60°. Several of our Baltimore growers recounted similar experience and both Mr. May and Mr. Asmus expressed the opinion that a remedy for the evil might possibly be found in the use of poorer soil. As a matter of course we exchanged views on the Puritan; it would indeed be a notable occasion now-a-days when half a dozen florists could get together without discussing this rose. Responding to a request for his opinion, Mr. May modestly admitted that he had paid dearly for his Puritan whistle, and while so far he had found it a somewhat unprofitable variety, he was inclined to believe that the Puritan might become more popular after its requirements were better understood. Mr. Lonsdale next "bobbed up serenely" and said that owing to the fact that Philadelphia growers were exerting themselves, as they usually do, the Puritan was much more popular in the Quaker city than in New York; as to its cultural necessities, Mr. Lonsdale said it required a light soil, plenty of heat, but would not bear as much water as other kinds. Mr. Asmus said he wouldn't advise any grower to throw away the Puritan, as he believed that toward spring it would do better and be in better demand. The question being asked as to whether Mrs. Laing was a profitable rose for forcing, Mr. May replied that he had tried it with indifferent success, he also tried a few plants outdoors and considered it the finest rose for summer bedding he had ever seen.

The Florist club has decided to hold an exhibition during next fall and it is to be hoped that our florists and gardeners will unite in their efforts to make it a successful affair, and as there is plenty of time in which to make necessary preparations and the committee in charge being a very capable one the prospect is rather pleasing. A. W. M.

#### New Orleans.

The second annual exhibition of the New Orleans Hort. society held April 3-6, drew much favorable comment from the local press and was considered a decided success from every point of view. The hall was elaborately decorated by plants and shrubs in addition to the competitive exhibits, the floor being laid out in a charming miniature landscape. Heavy cedar wreathing hung overhead while against the walls latania leaves showed effectively and made a pleasant foil to the brilliant colored flowers below. The cut flower display was hardly up to that of last year as the season has been unfavorable, still the exhibition as a whole was most excellent. The awards were made as below noted:

#### PLANTS.

Best collection of plants—First prize, J. Muller; second, J. H. Menard. Collection twenty-five roses—Fonta & Nelson. Ten roses in bloom—Despommier cup. E. Valdejo. Specimen roses in bloom—Fonta & Nelson. Collection geraniums in bloom—E. Valdejo; second, G. Chopin. Collection caladiums—J. Muller. Collection ferns—J. Muller; second, J. Eblen. Specimen fern—J. Muller. Specimen fern, exhibited by amateur, Mrs. Hart. Collection rex begonias—Fonta & Nelson; second, C. Thomas. Specimen rex begonia—Fonta & Nelson. Collection flowering begonias—C. Thomas; second, E. Ritter. Specimen flowering begonia—C. Ritter; second, C. Thomas. Specimen exhibited by amateur, Mrs. Cottam. Collection dracaenas—Joe Muller; best among amateurs, Mrs. Hart. Specimen dracaena, J. Muller. Specimen exhibited by amateur, Mrs. Hart. Collection palms—Fonta & Nelson; second, J. H. Menard. Specimen palm—J. H. Menard. Collection crotons—J. Muller; best exhibited by amateur, Mrs. Hart. Specimen orchid in bloom—John Eblen. Collection and specimen gloxinia—C. Thomas. Col-

lection inchsias—G. Chopin. Collection coleus—J. H. Menard. Collection heliotrope—J. H. Menard. Collection summer chrysanthemums—Menard. Collection pansies—J. Eblen; second, J. H. Menard. Collection double and single penunia—E. Ritter. Carpet bed—C. Thomas. Bed blooming plants—E. Valdejo. Best arranged jardiniere—Weiss. Bed blooming and foliage plants—Jaeger; second, Schmidt. Hanging basket—J. H. Menard; second, E. Ritter. Specimen Euphorbia splendens—J. H. Menard; second, C. Weiss. Specimen philodendron—C. Thomas. Specimen fourcroya—Menard. Collection verbenas—Menard. Initial bed—H. A. Despommier. Specimen pandanus—G. Chopin. Specimen cycas—J. Muller. Society's sweepstakes medal for best display plants—C. Thomas. Society's sweepstakes medal for best general display cut flowers—J. H. Menard. Display cut roses, correctly named—John Eblen. Display cut hyacinths—J. H. Menard. Assortment cut flowers—J. H. Menard; second, J. Eblen. Display cut phlox—E. Valdejo. Display marigolds—E. Valdejo. Display anemones—Mrs. Muller.

#### CUT FLOWERS AND DESIGNS.

Best floral design—First prize to J. H. Menard; second prize, C. W. Eichling. Funeral floral design—First, Charles Eble; second, J. Eblen. Floral design made of natural dried flowers—First, C. W. Eichling; second, C. Eble. Table decoration—Charles Eble; second, C. Menard. Sweepstakes medal for best display floral work, gold medal offered by society—Eble. Bridal bouquet—Eble; second, Menard. Hand bouquet—Eble; second, Menard. Loose bouquet—Eble; second, Eblen. Corsage bouquet—Eble; second, Menard. Handle basket—Eble; second, Menard. Table plateau—Eble; second, R. Ory.

#### Fancy Bedding.

The diagram is of a bed as planted the summer of 1887 in Lincoln Park, Chicago. It was sixty feet in diameter, and occupied a prominent position in the main parterre near the greenhouses.



KEY TO DIAGRAM.

1. Vase of plants. 2. Coleus tessellata. 3. Achyranthus Lindenii. 4. Coleus Verschaffeltii. 5. Coleus Wonderful. 6. Geranium Mt. of Snow. 7. Coleus Pine Apple Beauty. 8. Geranium Guillaume Mangelli. 9. Gnaphalium (outside border).

#### New York Notes.

Peter Henderson finds storing empty pots in soap boxes and then piling up the boxes, better than using a pot rack; there is less breakage and the pots can be more readily removed where wanted. A mixture of tobacco dust and sulphur is thrown over his young roses twice a week as a preventative of mildew and insect pests. He has found the following method of packing, the best for very cold weather: The box is lined with heavy paper; then pieces of board which fit in the box are placed inside and the box again lined with paper over them, the boards are withdrawn and the space between the two linings of paper filled with sawdust; an inch thickness of sawdust is thus placed entirely around the plants, but separated from them by one lining of paper. Plants so packed have travelled

long distances without injury in the coldest weather.

Ernest Asmus' houses lie on a side hill sloping to the west, with a rise of seven feet to the hundred. In his hybrid rose houses he begins to cut his crop at the upper end of the house and the plants bloom in rotation down to the lower end. He has hot water under pressure on the up hill system and it is very satisfactory to him. He blooms his lily of the valley in pure sand, using simply moisture and bottom heat. He shades the whole house with cotton cloth tacked on to the sash bars inside, and also shades the benches, with light board shutters until the flower stem starts, when he substitutes frames covered with cotton cloth. He uses the best bulbs and pips he can buy, and considers poor bulbs dear at any price.

John H. Taylor has three or four hundred Cypripedium insigne and found that the sales of cut flowers from them paid a good profit. He has 10,000 gladioli planted out in his houses for cut flowers. The bulbs were planted Nov. 28, last.

#### Philadelphia Plant Notes.

Cytisus racemosus is grown in quantity as an Easter pot plant. When well covered with their small yellow flowers they are very attractive and sell at good prices.

Mr. Craig fires his palm house all summer, and gets a big growth on his young palms in one summer. He considers Pandanus Veitchii a very profitable thing. Dracaena fragrans is a very handsome decorative plant. It is propagated from canes imported from Trinidad. The canes are laid thickly together in the cutting bench and when the eyes break the shoots are taken off and rooted. Propagation is much more rapidly accomplished in this way.

Since the introduction of the fern plateau in Philadelphia the sales of young adiantums in 3-inch pots has been very large. Craig & Bro. alone sold 40,000 the past year.

Charles X. Ilacs are forced into bloom for Easter. The plants are imported and cost about 40 cents each delivered in this country. When forced into bloom at Easter they sell for \$1 to \$1.50 each.

As his list of best forcing tulips Mr. Craig gives the following: Yellow Prince; Belle Alliance; La Reine, bluish white, and the bulbs are cheap; Vermillion Brilliant, best single scarlet; Tonnesol; Duc Vau Thol, for very early; Chrysalora, yellow; Proserpine, very fine bright rose pink, early, but bulbs rather high priced for forcing in quantity; La Candeur, fine double white for Easter, should not be forced early; Murillo, best double rose for late bloom; L'innocence, late single white.

He blooms a considerable quantity of lily of the valley in pots for Easter sales. The pips are heeled in a frame in original bunches over winter, covered with sand to keep out frost and with sash to keep rain off. They are potted—eighteen to twenty pips in a 5-inch pot—about March 3, placed under a bench and covered with a light layer of sphagnum. They are in bloom the week before Easter and are then hardened off by putting in a cool house or shed till used.

W. K. Harris grows immense quantities of blooming pot plants for Easter. His Hydrangea otaka are all specimens, and he gets them in best condition. He sorts them at least three times, keeping forward ones cool and brings the later ones into more heat. He grows about 2,500 hydrangeas for Easter. He grows azaleas



DRACENA FRAGRANS.

in quantity for Easter, and considers Mr. Van der Cruysen an excellent one for the purpose; it is a semi-double, pink in color, a good grower and never comes blind. A. Borsig is his best white and Marquis of Lorie his best double red. He is not ashamed of *Lilium Harrisii* and grows 1,600 plants in 4-inch pots for Easter. A fine lot of *Hermosa* and other roses are also brought into fine bloom for sales at that time. His *Hermosa* were in 6 inch pots, averaged two and a half feet in height and a foot through, with twenty-five buds to a plant.

Henry A. Dreer finds steam very satisfactory. He has used quite a quantity of sashes covered with the prepared hotbed cloth and is pleased with it; find that it turns frost even better than glass. Stock at his greenhouses was in good shape.

#### *Dracena Fragrans.*

So called on account of the fragrance of the flowers. The cut illustrates a plant about eighteen inches high and twenty-four inches spread, grown in a 6 inch pot. *D. fragrans* is, in all sizes, from twelve inches to as many feet high, useful as a decorative plant; specimens from six feet to twelve feet being grand for the adornment of churches and large halls. It requires but a moderate amount of pot room in comparison to the size of the plant that may be obtained. It is a native of tropical Africa, and while it grows freely in a temperature of 80° at night, will maintain good health in a temperature as low as 55° to 60° provided it be syringed sparingly when kept so cool; treated thus the foliage is made harder and better adapted to undergo, without injury, the changes of temperature incident to moving from place to place.

It is propagated by placing the stems on the propagating bench in two or three

inches of sand, with a bottom heat of 75° or 80°, and a light covering (say one-half inch) of sphagnum, which should be, at all times, kept moist; in about a month an eye will sprout from almost every joint, which, when about two inches long, should be taken off and rooted as any other cutting. These stems or canes are now grown in quantity in Bermuda, Cuba and other parts, and may be obtained at low rates from dealers; formerly these canes were scarce, but now that it can be obtained in quantity the plant will assume the commercial importance it deserves.

Philadelphia.

ROBERT CRAIG.

#### Heliotrope Under Glass.

We hear so many complaints about rust on heliotes of late, that I was tempted to write the following lines, hoping the suggestions will help some one to better success in growing this sweet and universal favorite to perfection.

There is no need for anybody to grow heliotes which are liable to get affected by rust, as we have many robust and healthy varieties of different shades, entirely free from the disease. At least this has been my own experience here, and I grow only one old variety under glass. Have experimented with most all the newer sorts, but after keeping them for a year or two, had to discard them again, as not suitable for winter blooming or on account of disease. The variety I grow is a very dark one, when grown out doors, but under glass is somewhat lighter, still you can call it dark, and *Roi des noir* is not any darker under the same conditions. The truss is rather larger than the kind named above, but the individual florets are a little smaller. The name of it I do not know, but it must be a very old variety, as I

have grown it for winter blooming as long as fourteen or fifteen years, when I selected it for the good quality and free habit, frequently making trusses four to six inches in diameter. But as there are more such robust varieties every one can make his own selection from his own stock.

Heliotropes delight in a temperature of a carnation house, and I know a good many florists will hesitate to believe this, but if they would give the plant a trial in such a house, and see the dark well-colored trusses of immense size, cool treatment will produce, they would never plant in a warm house again. To insure a good crop, heliotes should be planted by the middle or latter part of August in a bench or solid bed not too far from the glass, and be pinched back for six or eight weeks, so as to produce good bushy plants. We plant about fifteen or eighteen inches apart each way. From October 15 on, we let them grow without stopping them and in about three weeks have abundance of large, well-colored trusses, which will not wilt or drop off like those grown in a temperature of 60° or 70°, but be fresh and keep the individual florets on for days after being cut. I have often been asked by customers why our heliotrope lasted so much longer in good shape than the same article procured from any other florist, and I cannot give any other reason for it than the cool treatment we give to them.

Let me also say here, that the heliotrope pays (in a more limited quantity of course) better than the same space devoted to roses or carnations, even if we should have to sell them as low as \$1 per hundred, because there is a continuous flowering from November to the next November if you leave the plants in that long. We generally do here, and I do not throw the old plants out until the younger batch is in full flower. Even in midsummer and autumn the trusses under glass are better developed than those grown out doors and last better too. Full sun, plenty of light and good rich soil, with an occasional dose of liquid manure is essential to the welfare of the heliotrope. Some growers dig up plants which have been bedded out during summer and plant in the house; if kept shady and well syringed for a week or so they will do tolerably well, but will seldom get well established and flower profusely before January, while young plants, planted early, will grow right on and be in a healthy growing condition and in full bloom by the time cold weather sets in, two or three months ahead of the lifted plants. Insects will not trouble heliotrope to any extent if kept syringed regularly, but should green fly get a start, it will be better to place tobacco between the rows or under the bench, instead of giving them a smoking, for the leaves are apt to get scorched by the smoke, especially if grown in a higher temperature than 50°.

JOHN B. KELLER.

Rochester, N. Y.

Smlax.

BY WM. A. EKAS.

Read before the Gardeners' Club of Baltimore March 7, 1888.

This useful plant, coming as it does, from a country so different in climate from ours, makes it difficult to grow here, unless the circumstances attending the same, are under perfect control, and this can best be secured by keeping the glass on at all seasons.

At Mr. Feast's place, where I have been for some time, there are two houses



devoted to smilax, producing 3,500 strings from four to eight feet in length. The treatment has been given to produce only one crop each season. One of the houses has been planted twelve and the other six years; the same plants in the same soil have always produced good crops each year.

In its native place it is found growing in shaded dells of well drained peaty peat; the soil in use here is a light sandy loam, which from the annual use of a dressing of manure that remains on the border, brings it to the consistency of peat. It does not seem to require a very deep soil, as on frequent examinations at different seasons of the year, the roots or feeders are to be found close to the surface, and one root was found extending six feet at a depth of only two inches, which proves to my mind that the nearer the roots can be kept to the surface the better for smilax; this has been the key-note to the production of smilax, pronounced by visiting florists the best they had ever seen.

Work on smilax begins here as soon as the influence of the fall rain is felt, about the latter part of August. The borders which have had no care all summer, are cleaned of weeds and any remaining smilax, to make sure of no red spider to start with. Wires running the length of the house are fixed to the rafters, ten inches apart; they are the same on the border. Beginning on one side of the border a row of strings is tied to the wires eight inches apart; about one inch of well rotted manure is put in front of these strings; another row of them, more manure, and so on until the house is finished. The soil should not be stirred or forked, as it will surely break the roots, and the injury done can not be repaired the same season, and if the soil is the proper one this last operation will not be necessary.

After the "stringing up" and manuring is finished, a moderate watering is given—enough to moisten the soil six inches is plenty to start with—this will start growth, and in about two weeks or when all the shoots have started, a good soaking to moisten the border the full depth is given, and the house kept moist by occasional syringings. This will create a rapid growth, requiring constant attention to keep it from becoming entangled.

It is much better to tie the shoots to the strings, using some soft cord, than to force them around the string, as they are easily broken, and the resulting laterals do not make the quality of smilax that the main shoots would. When the growth has attained a height of two feet, syringing is gradually diminished and more air given, otherwise the smilax will be too soft and flimsy for early use, and be hurried up too much for keeping till spring. About this period in its growth brings longer and cooler nights, in which it seems to delight, and it becomes very stocky and firm; shading is beneficial at all times. The cool ends of the houses mentioned have been exposed to enough of frost to make quite a crust on the soil, and the only effect noticed has been much harder and firmer smilax than from other parts of the houses. This last fact is not necessary or advisable, and is only mentioned on account of the uncalled for alarm felt on the first discovery of frost in the house.

The smilax commences to flower about January 1, and continues for about six weeks. When the seed has "set" the plant gradually loses its bright glossy

appearance, and when they have obtained their full size the leaves turn yellow from the bottom of the plant towards the top. The seed is generally ripe enough to sow about May 1, and should be sown then to make good young plants for next season's use.

When cutting smilax for early use, cut about six inches above the ground, which leaves a good bunch of foliage to ripen the bulbs for the next crop. If cut too close, the after growth is premature and causes the plant to get out of season and useless for the required purpose. After all the smilax is cut, usually about the 1st of May, it should have a mulch of good short straw or some such clean material three inches deep to protect the roots from the direct rays of the sun; do not let it be anything that retains too much moisture; the glass should be shaded and the plants be in a state of rest.

The practice of putting temporary benches over the borders is not advisable, unless something can be grown that does not cause any drip or moisture under them. Last year there was such a bench used here for the first time, to accommodate some hydrangeas with head room, which could not be had otherwise at the time, and the position of the bench could be afterwards plainly noted by the less vigorous smilax.

It is not safe to go by any set rule, but the foregoing has been the treatment here—and to those who want to adopt this one, I think if they will compare the houses mentioned, their situations and surroundings, with the ones they intend to use for smilax, they may expect a good seasonable crop, superior to any three or four "cuttings" from the same plant, for decorating purposes.

#### Fancy Bedding.

The bedding which bordered a walk on Drexel boulevard, Chicago, the summer of 1887 was remarkably handsome. We give a diagram showing how a small section was planted. No two sections were planted alike, and the constant change made it unusually attractive.



KEY TO DIAGRAM.

1. *Acyranthes Emersonii*. 2. *Coleus Her Majesty*.
3. *Coleus Verchaffellii*. 4. *Coleus tessellata*. 5. *Coleus Velvet Mantle*.

Another handsome border used at another place on the boulevard was a long ribbon of *Begonia semperflorens rosea* edged with *Acyranthes Lindenii*.

#### "Cockscombs" as Bedding Plants.

Many of the florists in attendance at the Chicago meeting of the S. A. F. noted the beds of celosias and centaureas at Lincoln Park in that city and were much impressed with their beauty and oddity. They were certainly a departure and very handsome. Head gardener Stromback was continually asked the question: "How do you keep the celosias so dwarf and uniform in height?" In reply to these visitors and for the information of other readers we have obtained some notes on his method of handling the plants.

The variety he grows was obtained about ten years since under the name of President Thiers and he has kept up his stock by seed of his own sowing ever

since. The color of the "comb" is a deep scarlet, approaching crimson. He sows the seed the latter part of March in pure sand, as he finds that the seedlings "damp off" quickly if planted in soil. As soon as large enough to handle, the seedlings are pricked out in boxes of soil, and before they have made much growth in the boxes they are potted singly in 2½-inch pots, where they remain until the "comb" shows, when they are at once shifted into 4 inch pots. The temperature of the house is kept the same as for coleus, and the plants are held a little close until the roots start after shifting. The young plants are kept rather dry at all times as they are very prone to "damp off" otherwise.

The plants make no growth in height after the "comb" has begun to develop, and to keep them quite dwarf, growth must be retarded until it appears, when they may be treated more generously, as the whole strength of the plant then goes to the "comb." In spite of the greatest care there will be some plants which are a little taller than is desired, and these can be used in a bed by planting enough deeper to make the tops uniform in height.

#### Seasonable Notes on Shrubs.

BY WM. FALCONER.

*AZALEA AMIGEA* is perfectly hardy here and blooms beautifully about the middle to the end of May. It grows well and retains its foliage in evergreen fashion as perfectly out of doors as if wintered in the greenhouse, only its leaves assume a bronze-brown appearance, in the same way as do those of oriental arbutus, golden junipers, *Retinospora ericoides*, *Thuja gigantea* and some other conifers.

A VICE—US SQUEEZE—Trumpey's hand shake.

*AZALEA MOLLIS* shall ever remain a favorite with us for forcing, but for general planting out of doors, as it often is a little tender, it isn't likely ever to supersede the gorgeous Ghent azaleas.

*QUERCUS DAIMIO*.—This is one of the finest ornamental oaks in cultivation; perfectly hardy (with us anyway) and easy to transplant. Our specimens bear foliage often a foot or more in length, and proportionate width, and the old leaves are retained till the following May.

*QUERCUS DAIMIO* VAR. "PINNATIFIDA".—But when friend Trumpey showed me a couple of these—recently grafted plants each a foot high—I could hardly contain myself. The plants are in the grafting house and in full leaf. The leaves in size resemble those of the species but are very deeply cut into narrow lobes after the way of those of *Q. pedunculata* var. *lacinata*. Mr. Parsons brought them from California last winter.

*MAGNOLIAS*.—Mr. Trumpey tells me these are capital stock and daily becoming more popular. Ten years ago they had an immense stock and of large plants too; to-day they find difficulty in maintaining plants enough to supply the demand.

*MAGNOLIA PARVIFLORA MINOR*.—This is the only new thing I found among magnolias. They obtained it recently from California whence it was introduced from Japan. Although much like *M. parviflora* it is said to be smaller in all its parts and to have the reputation of being hardier.

**MAGNOLIA PARVIFLORA.**—This is one of the choicest gems of our garden. We have a fine thrifty specimen between four and five feet high. It bloomed in May '86, but not in '87, and I find that it is going to bloom again this year. Its flowers in size and form are not unlike those of *M. glauca*; and of a creamy white color with crimson stamens, and powerfully and deliciously fragrant. The flowers opened May 23—after the foliage began to unfold—and dropped before May 30.

**OTHER EARLY BLOOMING MAGNOLIAS.**—*Magnolia stellata* (Halleana) began blooming with us about May 20, and was the earliest of all in flower. The plants assume a stocky bush form; the flowers are very numerous and white, and the petals narrow and spread out or reflexed a little. It hasn't the stiffness of the other forms. The Yulan magnolia began to open April 28. It is the most showy of all. The flowers are large, white and abundantly produced on leafless bushes. While striking and beautiful most anywhere, they are seen to best advantage when they are growing in front of tall evergreen trees, as pines or spruces. Thurbur's and several other Chinese magnolias, all well worth growing are also now—early in May—in bloom with us.

**PICEA EXCELSA VAR. CONICA.**—This is a dwarf and most compact spruce well adapted for and much used in city gardening—in small plats, in vases and elsewhere where small evergreens are used. It is very hardy, of good form and color and not easily broken. Mr. Trumpey tells me the demand for it far exceeds the supply. He cannot get up a stock of it by grafting, as grafted plants don't assume the dense conical habit so desirable in the variety; in order to have it in its finest form it has got to be raised from cuttings. We have here several large specimens of it, and although some sixteen or seventeen years old, they still maintain their dense form and are as compact as can be and branched to the ground, and that too without the aid of the knife. And it is one of the few evergreens on our place that escaped the terrific blizzard of March last unhurt.

**THE ROSE COLORED JAPANESE WEEPING CHERRY.**—We have two specimens of this tree nine to ten feet high, with clean stems seven feet high, and a spread of branches twelve feet across. They are now (May 4) bursting into bloom, and appear like immense pink umbrellas. They are by far the most striking plants now in bloom on this property. The Yulan magnolias are conspicuous on account of their many large white flowers, and the forsythias on account of their profusion of bright yellow blossoms, but both are moderately common and to be found in many gardens. But such rose-colored umbrellas as are displayed in these Japanese cherry trees are extremely rare. They are perfectly hardy, free growers and most generous bloomers. The flowers are produced before the leaves appear.

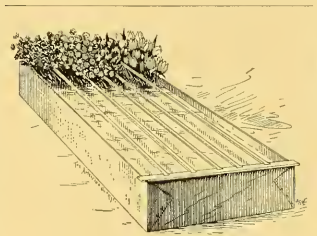
**CORYLOPSIS PAUCIFLORA.**—No early blooming shrub has given me more satisfaction this spring than has this Japanese plant. It is of dwarf bushy form and of neat and clean appearance. It began blooming in the second week of April, and now (May 4) although the flowers are fast falling, it even is conspicuous a short distance from it. The flowers are yellow, fragrant and produced in short racemes (of three blooms each) one from every joint of last year's

wood except from a few joints towards the end of the stoutest twigs. Each raceme is also furnished with several large pale yellow bracts that add to the showiness of the flowers. It is completely out of bloom before the foliage appears.

**XANTHOCERAS SORBIFOLIA.**—This is one of the finest flowering shrubs that has ever been introduced to our gardens. It is perfectly hardy. It comes into bloom in the third week of May, lasts a week or ten days in good condition, and the flowers are large, white and pink, in upright spikes which are produced in profusion. Our plants fruit abundantly. It is propagated by means of seeds and root cuttings. The roots differ from those of any other shrubs that I know. They are very long, soft, fleshy, yellow and thick as my little finger. From pieces of these roots cut up into bits an inch long and inserted as cuttings we get young plants. I had occasion to transplant a couple of specimens four to five feet high this spring, and on digging them up secured their long fleshy roots from three to five feet in length.

[A flowering branch of this shrub was figured in No. 53 of the FLORIST.—ED.]

**ROSA RUGOSA.**—Friend Trumpey is very enthusiastic over this rose and predicts a great future for it as a handsome garden shrub.



KEEPING CUT FLOWERS IN WATER.

#### Keeping Cut Flowers in Water.

The advantage and benefit of keeping all cut flowers with stems of some length in water is obtained without the use of innumerable jars and pots by some large eastern growers, by the use of galvanized iron pans about six inches deep, over the top of which is laid a rack of slats to hold the flowers in an upright position and to keep the kinds separate. The illustration gives a good idea of the pan, with some flowers placed in one end. Successive cuttings can be placed in front of the others until the pan is full. Cross slats could be used to subdivide the pans into more numerous and smaller compartments if to be used for a larger number of different kinds or varieties.

#### The Scarlet Geranium.

Those who remember the few varieties of the geranium that were in cultivation forty years ago cannot fail to be impressed with the great improvement it has undergone since that time, not only in the greater breadth and substance of petal and shades of color, but in the entire new strain of double flowers possessed of all the colors so conspicuous in the single varieties. In point of fact many of the newer sorts so entirely surpass their predecessors in show that the

most of these have gone out of cultivation. And even now it looks as if at no former time has there been such a rush of novelties to the front demanding recognition. Many of them it is true hardly deserving the encomiums bestowed upon them by their too ardent admirers, but not a few are possessed of almost every excellence the most fastidious critics could desire or hope to obtain. And yet it is believed that notwithstanding the great number already produced the time for surprises has not yet gone by; as the tendency to vary is as strong as ever, and florists as hopeful as ever that from every fresh seed they deposit in the ground something new in form or color will be obtained. These plodders may not understand the nature of those laws under which changes are wrought in the embryonic state, but they do know that by crossing one species with another, or one variety with another, they are working toward that end; at the same time fully recognizing the fact that the most marvelous results have been brought about without other aid than nature provides and holds in her own close keeping.

There is hardly a doubt but the present mixed race has sprung from the two species of *Pelargonium zonale* and *inquinans*, but how long these species were in cultivation before signs of improvement—as the florist would say—became visible we do not know; it is by the union of these however that the most of our finest varieties have been obtained. As *P. zonale* in its normal state is red with a somewhat orange hue, and *inquinans* the most intense scarlet, it is somewhat remarkable that flowers of so many shades should be found in their offspring. But so it is, and the fact speaks the most careful culture and breeding on the part of their admirers. We remember when no good pink variety was to be had, and not until the introduction of the Princess Alice nearly forty years ago was this want supplied. Now however that fine variety has been relegated to the shade, being eclipsed by not a few of the same color, both in the single and double classes. In other colors we have various shades of red, crimson, solferino and white, either as selfs or with various colors in the same flowers. What more need we expect or hope to obtain? Blue is out of the question, but there is some ground for believing that a clear yellow will yet be forthcoming. This belief is based upon the fact that progress has already been made in this direction, as is to be seen in such varieties as *Re Umberto* and *Golden Dawn*. These, it is true, are a long way from pure yellow, but as they have a decided orange tint, and as orange is a secondary color composed of the two primitives, red and yellow, there seems no natural barrier to prevent the proportions of these constituents being so affected in the course of generations that the red will almost if not altogether disappear.

But no one can foretell what the future has in store in the way of new varieties, and instead of indulging in regrets because of imaginary blanks in the scale of colors, it would be well to bestow increased attention upon growing specimens of those we have into perfect form, as it is in this state chiefly their surpassing beauty is displayed to the best advantage. To do this a little time and judgment is necessary, but not more than the subject warrants, as those can tell who have seen groups on competi-



tion tables, every one measuring from two to three feet in diameter, and the same in height, measuring from the bottom of the pots. A. VETCH.

New Haven, Conn.

#### The Home of the Rhododendron and Pinus Sylvestris.

Now that the public attention is being drawn to the culture of the rhododendron in America, it seems to me not amiss to give our readers a short account of this beautiful plant in its home and native state. With this object in view we visited the rising and picturesque health resort, Bournemouth, in the county of Hampshire, on the south coast of England.

Bournemouth is well known as one of the greatest health resorts in all England and from our own observations is not at all like any English town we have yet visited. The pine trees and rhododendrons are omnipresent, in fact these two seem indigenous to the soil. Like few English towns Bournemouth is built more on the plan of an American town, with wide streets and plenty of trees (pine trees); on all sides one is met with the rhododendron, not small scrubby plants in painted pots and boxes, but large healthy bushes that grow without care or attention. It certainly is a beautiful sight to see the glossy green leaves in winter and the glorious colors in springtime. They grow in among the cool dark pines, whose lofty heads seem to keep guard over one of the greatest beauties of this charming seaside town.

From the observations we have made we see no reason why the rhododendron should not be more generally cultivated than it is. In Bournemouth the climate is mild all the year round, not over cold in winter or too hot in summer, and we fancy that the shade of the pine trees has something to do with the luxurious growth of the rhododendron.

A fact worthy of mention is the manner in which the public gardens are laid out and taken care of; the landscaping is admirable. These gardens are situated in the center of the town and run from the sea two miles back. They are about two hundred yards wide and the landscape gardener that designed them deserves credit for the skill with which he has arranged them with choice flower beds and lawns, and here again the rhododendron is made a special feature. Choice varieties are planted alone in selected spots, and they are grouped together in many places where the public can enjoy their varied hues. The species of pine that grows here is the *Pinus sylvestris*. It is found all over, on the cliffs by the sea and in the private gardens, and as we have said before seems to protect the rhododendrons; not that it is at all necessary to give the rhododendron any protection, for at Hatfield, near London, (the country seat of the Marquis of Salisbury, of which I hope to send you an account shortly) they are not at all protected.

In conclusion we would advise all our readers who intend visiting England not to omit a visit to Bournemouth, or "Rhododendronland." It is a pleasant journey and one that will repay the most exacting. Now that the London South Western Railway have made a short cut, it takes only three hours from London. Take the South Western train from Waterloo station (London terminus) and in three hours you will be in Bournemouth.

It is worth while to take the railway trip alone, as you pass through one of the most picturesque parts of England and the noted pine woods of Ilants. One can enjoy a railway trip here as the road bed and cars of the South Western railway are all that could be desired; the management is excellent and from the genial manager, Mr. Scotter, down to the guards (or conductors) every attention is paid to the traveler. W. H. S. T.

London, April 13, 1888.



Cornelia Cook.

I have a bed 60x8, in center of house, half Cooks and half Perles, five rows, planted fifteen inches apart each way, which are doing splendidly; were planted from 3-inch pots last July. The Cooks have filled up the bed and are four feet and more in height, tied up to stakes. Will someone experienced in growing this rose, tell me what to do with them to keep them as dwarf as possible. Will they bear pruning back much, to get them in shape for next winter's forcing?

A. M. P.

#### Fragment Polyantha Roses.

It is announced by the *Journal des Roses* that Souper & Notting have succeeded in raising several varieties of dwarf polyantha roses, the flowers of which are fragrant. Four varieties were secured by crossing the polyantha Mignonette and the tea-scented Marquise de Vivien, and three are described as fragrant. The four varieties are Clara Pfister, clear carmine, with a silvery white base, plant dwarf, very free-flowering, and flowers fragrant; Hermine Madele, of dwarf habit, the little flowers very well formed, in color creamy white, shaded yellow; Princesse Henriette de Flandre, a vigorous grower, with flowers of a salmon-yellow tint, nankeen-yellow in the center, and possessing a fragrance resembling that of violets; and Princesse Josephine de Flandre, of dwarf habit, the flowers of a bright rose color, with a salmon-yellow base, and highly fragrant.

#### Rosa Rugosa.

A hardy, robust, single-flowered but highly ornamental species from Japan. It does not throw up long shoots as "Jacq." does nor form a bush like Planter, but assumes more the form of a dense shrub. Its flowers are large, rose-purple, fragrant, several together and closely set terminating leafy branches. In our collection they are—barring R. alpina var. glandulosa and R. a. var. pubescens—the earliest roses to come into bloom that we have got, and they continue in bloom scattering all summer long, and in fall the flowers are succeeded by a liberal crop of large, showy, bright red fruit. While the flowers have no more immunity from the ravages of rose beetles than have the flowers of any other roses, the foliage

which is more ornamental than that of any other rose is seldom injured by insects. Indeed, a prominent New York florist tells me that before long he expects the foliage of *Rosa rugosa* shall be in much demand among cut flower florists. It also becomes beautifully tinted in fall.

This rose is readily propagated from suckers and seeds, both of which it produces freely. But so far the supply is not equal to the demand. It is only of use as an outdoor rose. In order to have it appear to best advantage grow it as isolated specimens or masses. Never mix it up with other roses or shrubs. There are a good many varieties of it, both single and semi-double. All the singles are good, but the pure white one (R. r. alba) is the most desirable. Among red-flowered ones Dawson's crimson has no equal. Its flowers are bright crimson—deeper and brighter than that of any other that I have seen. It was raised by Jackson Dawson at the Arnold Arboretum some years ago. All the semi-doubles that I have seen have been miserable stuff and not nearly so beautiful as the single-flowered ones.

Mr. E. S. Carman of River Edge, N. J., has succeeded in raising a lot of hybrids between *Rosa rugosa* (the seed-bearing parent) and Harrison's Yellow. I saw and examined them a few weeks ago. They are a thrifty lot of little plants six to twenty inches high. Only one had bloomed yet. No doubt they are true hybrids. One plant is very much like a true *rugosa*, but all of the others appear to be intermediate between the parents both in wood, wood-buds, spines and foliage, and no two seem alike. WM. FALCONER.

Glen Cove, N. Y.

#### Packing Plants.

Our experience with young roses shipped to us has been the same as that described by Mr. Albert Williams in a recent issue. Sometimes the balls are almost as hard as pressed brick, and not only are the roots broken in separating, but the plants are crushed so that a number out of every order are worthless. We too, are willing to pay more for better packing. N. B. WESTGATE & SON.

Houston, Tex.

#### Packing Flowers for Market.

This subject is one which should not need further comment, but an inspection of the flowers as received by a large number of dealers would indicate that there is abundant room for improvement in packing as practiced by very many growers. The practice of rolling roses into tight bunches of twenty-five or fifty, should have been obsolete years ago, but unfortunately it is not. Out of every bunch so made there is from three to eight injured ones after being handled in packing and unpacking.

To carry without injury, roses should be packed in single layers in flat pasteboard boxes or wooden trays, all of each variety together, and sorted so as to be of uniform quality in each box. They can then be opened for inspection, packed and repacked with rarely touching the flowers—and every time a flower is handled it is injured, no matter how carefully it is done. Flowers of only medium quality if packed carefully and attractively will frequently sell better and bring better prices than flowers which were originally of better quality, but which have been injured by careless packing or



RICHLY MADE GATES AJAR.

jumbled together in such a way as to look "mussy." Some growers say that they "can not afford the time to pack their flowers as carefully as glassware," that "it is the dealer's business to fix them up in attractive style." To these we would say that it certainly ought to be worth a little time to prevent a deterioration of from ten to fifty per cent. in the value of your product. If you can save from five to ten dollars on each consignment by a little care and a half hour's extra work, is it not worth your while? Ascertain from those florists who are careful in packing if they do not secure better returns for a given amount of stock than you do for yours. The difference will be noticeable at all times, but especially during times of surplus in the market. Don't pack carefully for the dealer's sake, but for the extra dollars it will bring you.

Another practice we want to mention is that of placing poor and crippled flowers among those of good quality. The effect is to lower the standard of the whole lot down to that of the poorest, rather than to bring the standard up to that of the best as many seem to imagine. Don't try any averaging scheme. Keep each quality by itself; charge a good price for the best ones and sell the others for what you can get, it will pay the best in the end.

## Gates Ajar.

Our illustration does not do justice to this richly filled design which was recently arranged by Benjamin D. Hill, Peabody, Mass., for the employees of the B. & M. R. R. and used at the funeral of an official of the road. The flowers on the gate are principally pansies, and in addition to roses, carnations, camellias, etc., a variety of orchids add much to the richness of the rest of the design. The spikes of tiny flowers which fringe the top of the arch we judge from the photograph to be heaths, and the feathery vine below it, *Asparagus plumosus*.

## Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1887.

May 16—Tem., morning 55°, noon 64°, evening 64°. Wind NE. to N. Commenced planting out geraniums at south end of park. Commenced filling tops of stands with plants.

17—Tem. 50, 56, 54. N. to NE. Planted beds of geraniums, alyssums and pansies. Finished filling tops of stands with plants. Filled vases around Indian monument with yuccas and vines.

18—Tem. 53, 63, 64. N. to SE. Planted bed of alyssum and *Verbena venosa*. Repotted old fuchsias. Repotted celosias into 4-inch pots.

19—Tem. 60, 70, 70. SW. to SE. Planted out a bed of geraniums and two beds of fuchsias. Continued filling vases outside with plants.

20—Tem. 72, 80, 79. S. to SE. Filled vases and stands at south end of park. Planted beds with geraniums and petunias. Planted out dahlias.

21—Tem. 70, 76, 78. S. to SW. Commenced taking up tulips, spaded beds so cleared and planted same with geraniums. Continued filling vases and stands outside.

22—Tem. 73, 81, 74. S. to N. Sunday.

23—Tem. 69, 71, 60. SW. to N. Took up and heeled in tulips in beds not before cleared. Commenced planting arabesque at south end. Planted bed with geraniums and two small beds with stocks. Filled window boxes and vases with plants.

24—Tem. 66, 80, 65. SW. to WNW. Continued planting carpet beds and arabesques.

25—Tem. 58, 76, 70. W. to NE. Same as yesterday and planted with geraniums, verbenas and heliotropes, the beds from which tulips had been removed.

26—Tem. 55, 62, 60. N. to ESE. Same as yesterday and commenced planting canna beds.

27—Tem. 63, 62, 60. N. Planted central coleus bed. Finished planting canna beds. Repotted achimenes, begonias, etc.

28—Tem. 60, 65, 65. N. to E. Finished planting coleus bed and arabesque at south end. Planted out gladiolus. Removed camellias and azaleas to the frame yard, plunged the pots and built a lath shading frame over them for the summer.

29—Tem. 69, 89, 74. SE. to SW. Sunday.

30—Tem. 62, 74, 65. W. to S. Planted beds of annuals west of Stockton drive. Took rubber trees from conservatory and placed outside. Quit work at noon. Decoration Day.

31—Tem. 55, 65, 57. W. to E. Continued planting beds of annuals. Arranged empty pots in shed. Washed and cleaned wood-work in conservatory.

## Boston.

Violets scarce and very small.

Smilax is getting more plentiful.

M. B. Bunker, florist, Beacon street, has made an assignment. Some of the large growers are badly left.

Galvin Bros. are having a new front and show window put into their store. It will then be one of the handsomest stores in the city.

Sam'l. Rodden, gardener to Mr. Robt. C. Winthrop, died very suddenly at his home on May 5. He was a member of the Gardeners' and Florists' club.

Tulips and hyacinths are coming in abundantly from outside. Trade is rather slack and although the quantity of roses, etc. in the market is not large, yet there is sufficient for all demands.

The Gardeners' and Florists' Club held another of their popular suppers on the evening of May 8. About one hundred of the members were present. A letter was read from Mr. J. N. May of Summit, N. J., who had expected to be present, expressing regret at his inability to come. A beautiful and most acceptable surprise was the presentation to the club of a full set of the "Dictionary of Gardening," by Mr. J. A. Penman. Mr. Penman was present as a guest of the club. A quartette composed of members furnished acceptable music, and the work of enter-



taining was further carried out by Mr. J. M. Galvin with humorous songs, Mr. Turley with recitations and Mr. Ingram who handled the bagpipes in a masterly manner. Speeches in response to various toasts were made by prominent members of the club. W. J. S.

#### New York.

William C. Wilson retires from the retail cut flower trade June 1, and will hereafter give his whole attention to his Astoria greenhouses and to the wholesaling of plants and flowers.

Peter Okkerse, who has been an assistant of William C. Wilson for fourteen years, succeeds him in business, having opened a fine store at 11 East 14th street. Mr. Wilson will make this store his headquarters, having his private office there.

African Marigold Weigandii makes a blaze of rich color in 14th street, and is introduced as a novelty.

Fred Gordon has introduced a vase made of papier mache for lawn decoration on the occasion of garden parties. It is four feet high, of classic shape, very ornamental and easily handled.

Plant auction sales are unusually successful this season, particularly in the line of orchids. A few days since 300 lots aggregated \$3,000. There were thirty-five bidders in the rooms; a Vanda Lowii with four leaves and which weighed a quarter of a pound, was purchased by James R. Pitcher, Esq., for \$135; a Cattleya exoniensis was bought by the same gentleman for \$75. John Eyeran, Esq., of Easton, Pa., bought a Cypripedium Fairieum of small size for \$105. Mr. Dissault purchased a Dendrobium nobile for \$45.

Plans for the floral decorations of New York's centennial are already in course of projection by Klunder.

There will be very little decoration beside that with plants Decoration Day; the orders now in for arrangements of public statues, etc., are for growing plant designs, and not the garlanding that is so soon blasted by the elements.

Some 77,000 tulips have been set out in designs in city parks and 200,000 pansies.

There is a prospect of the Victoria regia lily being displayed this summer in one of the down town parks.

Phlox subulata is making a pink, purple and white carpeting around the rocks in Central Park.

Morning Side park is to be laid out with hardy growth entirely. This is to be made a nursery for hardy plants that cannot be obtained in the quantity required of florists.

Twelve fine greenhouses are to be erected at Mount St. Vincent, Central Park, and the old propagating houses there will be torn down.

A few acres in Central Park near Mount St. Vincent are kept as a horticultural reserve, and here may be found some interesting specimens. A hardy lemon tree, the only one of its kind in this country, thrives all the year round. Hogg's original specimen Japan maples and magnolias are there, and a colony of rare and interesting trees and shrubs.

S. J. Burnham & Co. made a splendid plant decoration in Trinity Church Ascension day.

The veteran florist, Isaac Buchanan, has charge of the private square Gramercy park this year. The contribution for its maintenance is \$2,000. Those

who have done the job previously state "there is no money in it."

Forsythia suspensa is making a splendid tangle of golden strands on the knolls in Central Park.

#### Mending a Bursted Cast Iron Boiler.

A cast iron hot water boiler at the greenhouses of Mr. W. H. Kellogg, Galewood, Ill., burst recently and several houses were in danger of frost; but this disaster was averted by promptly drawing the fire, stopping the hole—which was on the inside about six inches above the fire bars—with a wooden plug, and bricking up from the bars over the plug to keep the latter from the fire. The boiler was again put to work and served admirably until a new one could be put in.

#### New Notes.

WASHINGTON.—The department of agriculture has asked for an appropriation of \$5,000 for the support of the national herbarium.

ALBANY, N. Y.—John Dingwall died May 2, in the 73d year of his age. He was the oldest florist in the city, having located his greenhouses here in 1847.

WICHITA, KAN.—Albert Ellis will build several new houses this season, the same to be heated by steam. Mr. Ellis is also superintendent of New Lawn cemetery of this city.

ST. LOUIS.—Fire destroyed the stables, coal sheds and two new packing sheds at the greenhouses of the Jordan Floral Co., April 17. A valuable horse was burned in the stable. Total loss about \$2,600.

DENVER.—On Tuesday, June 13, at the Mammoth rink in this city, will commence the three days' floral, strawberry and fruit exhibition of the State of Colorado. Premiums to the amount of \$145 are offered in the floral department.

MILWAUKEE.—The Wisconsin club is making arrangements for a show of flowers and vegetables in September. Frank Whitnall & Co. have leased the greenhouses belonging to F. R. Ellis and will run them in connection with their own.

SAN FRANCISCO.—The daily *Examiner* of April 2 devoted nearly a full page to a description of the Easter floral decorations at the various churches, illustrating the same with sketches of those at ten of the churches. Most of the decorations were remarkably elaborate. Potted palms and other plants were largely used.

LOUISVILLE, KY.—In a very effective church decoration at Easter, a large cross of lilies occupied the center of a group of decorative and blooming plants; over the cross was an arch of foliage and flowers bearing the words "He is risen." At each side were standards covered with flowers and foliage and bearing floral banners upon which were appropriate mottos.

OMAHA, NEB.—"French tulips" of which quite a number were recently sold here by a mild looking individual who wore spectacles, have proved to be what is commonly known as "Indian turnip." A brigade of angry ladies are looking for the mild-mannered man and his lithograph which represented the "French tulip" as a thing of beauty and a

joy for at least a year or two. But he undoubtedly has important engagements elsewhere.

PITTSBURG.—Mrs. Andrew Carnegie, through Superintendent Hamilton of the Allegheny parks, has offered a prize for the best new variety of chrysanthemum raised from a seedling which shall be exhibited next November at the exhibition of the New York Horticultural society. The prize is an open one and may be competed for by any person who resides within the boundaries of the United States. Just what the prize will be the lady has not made known.

NEWARK, N. J.—In the suit of Charles Wrege against Jersey City for \$6,000 damages caused to his greenhouses by bursting water mains, the jury gave \$800 to Mr. Wrege after three hour's deliberation. The case occupied three days. The florist's troubles began in 1885, when the water main near his place burst and flooded his greenhouses. In 1886 they burst again, and all his trouble was repeated. The flower mission commenced its work of distributing flowers to the patients in hospitals, etc., on the 4th inst.

ST. LOUIS.—Mr. Wm. A. Hanft, with the Jordan Floral Co., was married to Miss Annie Clark, April 30. Miss Clark's parents opposed the match, and the wedding ceremony was quickly and quietly performed at the residence of a minister. It is reported that at the time the knot was being tied, the bride's father was walking up and down the streets with a monkey-wrench in one hand and a "gun" in the other, prepared to give his would-be son-in-law a warm reception. No one has yet ascertained what he intended to do with the monkey-wrench. The overflow of mutual affection had done no damage at last report.

CHICAGO.—Geo. W. Miller, the Wright's Grove wholesale florist has been having a decidedly interesting time with the postal authorities. A short time since he began to receive complaints from correspondents that no attention was paid to orders sent him, though cash or checks were enclosed. As he had not received any of the orders named he started an investigation. Chief Inspector Kidder sent a number of decoy letters of which about half were taken by the thief, who has not yet been located, though one employe at the north side station has been discharged, ostensibly for errors in distributing. The *Inter Ocean* of May 9 devoted nearly a column to hauling the P. O. officials over the coals.

BALTIMORE.—The April exhibit of the horticultural society, while very fine, did not equal former exhibits. First premiums were awarded to T. Harrison Garrett, Andrew L. Black, Robert J. Halliday, Charles Campbell, gardener for Gen. Geo. S. Brown; Conrad Hess, "Miss Mary, from Mr. Robert Patterson's," Edwin A. Seidenwitz of Annapolis; Ed. Hermann & Bros., John Cook and James Pentland. A second premium was awarded for cut pansies to Wm. Fowler of Clifton. Mr. T. Harrison Garrett's exhibit consisted of a fine assortment of orchids, pansies, ferns, palms, cacti, and a banana tree. Others exhibited geraniums, coleus, fuchsias, pelargoniums, azaleas, lilies, hydrangeas, tulips, roses and cut flowers. Mr. Edwin A. Seidenwitz received the first premium for a handsome floral easel design of roses, nasturtiums, coreopsis and orchids.

LOS ANGELES, CAL.—The annual flower festival opened April 17 and continued

two weeks. This has come to be the society event of the season, and the quantities of flowers displayed can hardly be computed. The flowers were replaced by fresh ones as often as required, and new arrangements and designs were to be seen daily while the festival was in progress. Prizes of \$200 for the best exhibit and \$150 for second best exhibit were sharply competed for as were also prizes of \$100 for handsomest original floral design and \$75 for second best. A striking design represented the crumbling ruins of the Granadan Alhambra. The walls were of La France, Jacquemont, Niel and Bon Silene roses, carnations, verbenas, hyacinths and moss; the tower of smilax and lily of the valley. A light-house of roses was twenty feet in height and was lighted by an electric light. The net proceeds from the festival were nearly \$10 000, which was turned over to a deserving charity.

#### SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant ads. not admitted under this head.

**SITUATION WANTED**—As florist and gardener in a commercial or private place. Good references. M. care American Florist, Chicago.

**SITUATION WANTED**—By a first-class rose grower. Do not want any applicant who is not willing to pay a first class wages. Address J. H. H., care American Florist, Chicago.

**SITUATION WANTED**—By a young lady florist; 5 years' experience with a prominent St. Louis house. References exchanged. Address FLORIST, care M. L. G., 821 N. 10th St., St. Louis, Mo.

**SITUATION WANTED**—As head gardener or foreman in a large establishment, by an energetic young man, 14 years' practical experience. Under, aged 28. Address Y. Z., Rose Hill Nurseries, New Rochelle, N. Y.

**SITUATION WANTED**—By a German; age 50; single; good at anything pertaining to horticulture. Best of references. A first-class private place preferred. Address with all particulars. FLORIST, care National Hotel, Indianapolis, Ind.

**WANTED**—Three thousand feet of second-hand 4-inch greenhouse pipe in good condition. Address F. H. MOSES, Buckport, Me.

**WANTED**—To open business relations with seed and plant firms. Please send catalogues to TJADERS FROHDEL, Stockholm, Sweden.

**WANTED**—Greenhouse boiler. A second-hand Carmody or Allerton hot water boiler for greenhouse. State size, how long in use, present condition, and price. A. S. ESTERHED, No. 30 East First St., Dayton, Ohio.

**WANTED**—A first-class and experienced propagator of roses, clematis, conifers and broad-leaved evergreens. State salary, and where formerly employed. Address CALIFORNIA NURSERY CO., Niles, Alameda Co., Cal.

**FOR SALE**—In lots to suit, a number of new No. 1 hotbed sash—sold for no fault. For price, etc., address A. H. BARBON, Lock box 312, Hartford, Conn.

**FOR SALE OR RENT**—Four greenhouses in good central location, in a city of 15,000 inhabitants. For terms, address CHAS. A. BRUCKMAN, 230 N. State Street, Elgin, Ill.

**FOR SALE**—A greenhouse property in northern Indiana, with 2,000 square feet of glass, in a city of 10,000 inhabitants, natural gas. For further particulars address G. C. LANGE, Peru, Ind.

**FOR SALE**—The best retail florist's and seedman's business in the Northwest (population 150,000). Reason for selling, with full particulars furnished on application. Address BATA, care American Florist, Chicago.

**FOR SALE**—A good paying florist business; only one in a town of 20,000 inhabitants; 3,000 ft. of glass, within six blocks of postoffice; want to sell in June or July; reason not able to handle increasing business. Correspondence solicited. MRS. GEO. LOW, 808 South 1st St., Stillwater, Minn.

**FOR SALE**—Fine retail stand, central location in city of Chicago. Two greenhouses covering space 15x10; office and telescope attached; heated by hot water. All in good repair and well stocked. Room to build several new houses. Will sell for 1,500 cash, as room will leave city. Address MACK, care American Florist, Chicago.

#### IMPORTER AND GROWER HYBRID PERPETUAL ROSES

WILLIAM H. SPOONER,  
Jamaica Plain, Boston, Mass.

1888.

## ROSES FOR FLORISTS.

We offer the largest and most complete stock of Roses in this country. Straight 2½-in. plants, propagated from thoroughly matured field grown plants, and grown in ordinary soil without manure or other stimulating material. They resist disease, start quickly, grow rapidly and give best results.

**ALL THE LEADING VARIETIES** In large supply at very reasonable prices—*Am. Beauty, Papa Gontier, Golden Pearl, W. F. Bennett, The Bride, Her Majesty, La France, Genl. Jacqu., Perle des Jardins, Niphetos, C. Mermet, M. Robert, Pierre Guillot, Souv. d'un Ami, Sunset, Mad de Watteville*, and hundreds of others.

**ALL THE LATEST NEW ROSES**—*Lucile, Mad. Etienne, Mad. Scription Cochet, Mille, Claudine Perreau, Docteur Grill, Vicomtesse de Waulter, Baroness de Fonville* and all choicest varieties.

**HYDRANGEA GRANDIFLORA**—*A Specialty*.—Immense stock, strong, open ground plants, all sizes, very low. Also *Buxus Variegated Leaved Althea, Japan Judas, Japan Snow Ball (Viburnum plicatum), Japan Rose (Rosa Rugosa), Japanese Eulalia, and a full line of all the best Hardy Shrubbery and Climbing Vines, including Ampelopsis Veitchii (Boston Ivy), Akebia Quinata, the New Italian, and other Sweet-Scented Honeysuckles, etc., etc. New Violets, Chrysanthemums, and Hardy Phlox.*

Special Wholesale Price List free on application to Florists, Market Gardeners and Dealers only. Lists printed, special selections made, correspondence solicited. Address

## THE DINGEE & CONARD CO.,

—ROSE GROWERS,—

WEST GROVE, Chester Co., PA.

## THE THREE B. B.'s.

**BRIDE, BEAUTY, BENNETT,**  
Still rank as the three best roses of recent introduction for forcing. Offer also  
**PAPA GONTIER, PURITAN, METEOR,**

And all other new and standard varieties of Teas, Hybrid Teas, Hybrid Perpetuals, etc., etc., that are desirable for the trade, in extra fine plants at reasonable prices. I also offer for the first time

### COLUMBIA (NEW 1888.)

A bedding rose of very superior merit. For description, prices, etc., etc., write for Trade List to

### JOHN N. MAY,

SUMMIT, NEW JERSEY.

## JAMES L. BOYSON,

CAEN, (CALVADOS) FRANCE.

1st Prize for Cut Blooms, Paris, May, 1887.

My Catalogue of the NEW

### EUROPEAN ROSES

will be ready January 1, 1888, and will be sent FREE on application.

A large stock of the last two years varieties, as well as all the older kinds for sale.

Send for my complete Catalogue of over 1,200 varieties, with raisers' names and date of sending out.

### — ROSES. —

## JAMES HENDRICK,

FONT GROVE,

Near Silangerlands, Albany Co., New York,  
HAS ABOUT 20,000 ROSES

From choice, healthy stock that he can with confidence recommend to the trade, such as PEKLES, BRIDES, MERMETS, SOUVENIRS, LA FRANCE, SUNSETS, AMERICAN BEAUTY and BON SILENE,

In lots to suit those who want. The stuff is all in 4-inch pots—true to name, and just as represented. Those who want plants will not regret sending an order. Prices reasonable.

ADDRESS AS ABOVE.

## OUR NEW TRADE DIRECTORY

Contains over

**6,000 Names of (Live)**

Florists, nurserymen and seedsmen, in the United States and Canada.

PRICE ONLY ONE DOLLAR.

AMERICAN FLORIST CO., Chicago.

1888.

## New American Roses

### SOUVENIR OF WOOTTON and ANNIE COOK.

**Souvenir of Wootton** is a red Hybrid Tea raised from seed of Bon Silene fertilized with Louis Van Houtte. It is perfectly double, as sweet as La France, and surpasses any hybrid tea in growth, and blooming on my place every shoot with hardly any exception produces a flower. The shoots are long and erect and produced quickly and very freely.

**Annie Cook** is a delicate shade of pink changing to white under glass in mid-winter. It is a seedling from Bon Silene; extra strong grower, and the flowers can be grown to extra large size. Both roses besides being great winter bloomers will make valuable market roses.

New Violet, Md. Millet, of a distinct rose color shaded with lilac; has proved, so far, perfectly healthy. It is a splendid grower and an immense bloomer.

#### PRICES:

	Per doz.	Per 100
Souvenir of Wootton, 3-inch pots.....	\$6.00	\$35.00
4-inch pots.....	8.00	
Annie Cook, 3-inch pots.....	6.00	35.00
Violet, Md. Millet.....	2.50	8.00

All orders must be accompanied with cash.

ADDRESS: J. COOK, FLORIST,  
BALTIMORE, MD.

## PERLE DES JARDINS.

### ROSES A SPECIALTY.

Vigorous and robust young plants, propagated from healthy stock, which was never afflicted with Black Spot, nor produced bulb-rot. Thumb \$5.00 per 100; 3¼ pots, \$10.00 per 100. Also La France, Niphetos, C. Mermet, Bon Silene, at same rate. Papa Gontier \$10.00 to \$15.00 per 100. Discount by the 1000.

### J. KADLETZ,

Box 170. STAPLETON, Staten Island, N. Y.

## NOVELTIES IN ROSES.

All the latest new varieties; also the leading forcing varieties Teas, Hybrid Teas and Hybrid Perpetuals.

Novelties in Chrysanthemums. Catalogue specialties at lowest rates.

Trade List now ready, mailed on application.

JACOB SCHULZ, LOUISVILLE, KY.

## 25,000 Forcing Roses for Florists,

	Per 100
The Bride, Perle des Jardins, La France.....	4.00
Sou. d'un Ami, C. Mermet.....	4.00
Francis Bennett, Duke of Connaught.....	10.00
Mad. Watteville, Etoile de Lyon, Malmaison.....	5.00
Sombreuil, Hermosa.....	5.00
Adam Teas, Queen Scarlet, Safrano.....	4.00
Also 12 of the best new Chrysanthemums.....	5.00

ED. MORAT, 719 Fourth Ave., Louisville, Ky.

### E. BENARD,

ORLEANS, FRANCE.

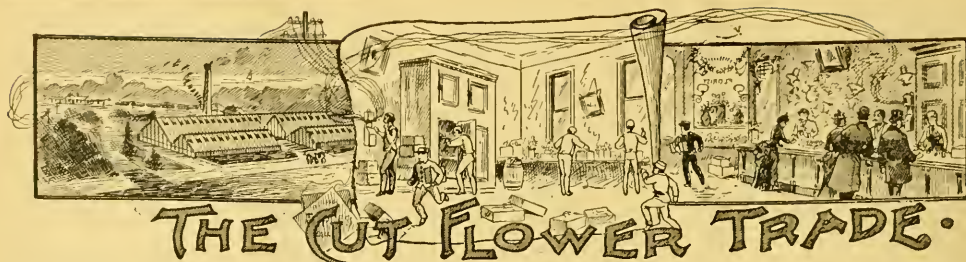
ROSES ON THEIR OWN ROOTS  
A SPECIALTY.

NURSERY STOCK OF ALL DESCRIPTIONS  
For particulars apply to

E. BENARD, JR.,

P. O. Box 1400. San Diego, Cal.





### Latest Floral Styles.

The craze for wild flowers is more pronounced than in springtimes heretofore. Meadow cowslips are in full supply and lively demand. They are placed in clusters in the fashionable spring flower basket used for favors, and are carried by bridesmaids. There were nine bridesmaids at a very stylish wedding the other day. One carried a bunch of trailing arbutus, tied with blush satin ribbon, another a cluster of buttercups with ribbon to match; still another a large bunch of white violets; one a bunch of Russian violets, another mignonette, another Marguerites, one daffodils, one Narcissus poeticus, and one a bouquet of ferns. The latter was an exquisite combination of hardy ferns, there was a ribbon finish.

Ribbon is not used as freely as it has been, there being a twining of soft foliage instead on the handles of baskets, and on bouquets for gifts. It always appears on wedding bunches, however. Bridal bouquets are composed almost universally of lily of the valley and white roses. The lily of the valley forms a thick fringing in the center, being put in without foliage; the roses form a band on the outside. The edging is of Farleyense ferns.

Room decorations are made almost entirely of blooming plants and foliage plants. An even band of flowering plants of one sort, say hydrangeas, are placed around the room close to the base, the pots being hidden by a banking of ferns or selaginellas. At the corners of the apartment there is a gradual rise in the height of the plants until a pyramid is made. The fireplaces are filled with blooming pot plants and the hall and stairways are lined with them. Exquisite arrangements with plants are made on hall mantel pieces, and for that matter, on the drawing-room mantels. Groupings of small plants are made on the little shelves, the pots being entirely screened with foliage. Lines of primulas edge the mantels, smilax, asparagus or lycopodium covering the pots. Tall blooming plants are put at the base of the newel post, the pots being hidden, and a blooming specimen plant surmounts it. Removing all plaques, panels and curtains from walls and mirrors, gives a severe appearance to decorations, yet there is a great show of bloom. The base of mirrors are elegantly banked with plants. Pale pink rhododendrons, with hydrangeas of a lower height and a finish of white lilacs beneath, with a gradual descent of selaginellas, was the lovely arrangement of a pier glass at a reception yesterday.

The free use of silver for flower holders on the table continues. Between the bowls and epergues that contain large roses, there is a bedding that entirely covers the board to the line of the cov-

ers. Moss rosebuds are used largely for this bedding, or if there are large lilies in the silver center dishes, lily of the valley is used for the bedding. Favors of flower baskets, such as a picture is given of elsewhere, are popular.

Steamer gifts of ships, steamers, sloops, skiffs and all sorts of craft formed of flowers are favorite. They are artistically made up and are really very showy designs. They are invariably placed on a bed of ferns or roses. A ship covered with Jacqueminot roses, and resting on a large flat basket of these flowers, was one of the rich designs that "sailed away" yesterday. In all arrangements a mixture of many sorts of flowers is avoided.

FANNIE A. BENSON.

New York.

### Washington.

A notable event of the season was the reception or house-warming of the well-known Mexican Minister and his charming wife, Madame Romero, in the spacious Legation building erected in this city by the Mexican government. The structure contains thirty-five apartments and on this occasion the florists' art was given unstinted range; the result was that Small & Sons did themselves and the profession great credit.

Upon entering the wide hall an embowered vista of a hundred feet in depth extended back through the archway leading to the hall-room and music alcove in the rear. On the one side the large and ornate stairway—flanked by a ponderous newel, capped by a most graceful palm, and balustrades interwoven with ivy, tipped with *Asparagus tenuissimus*—wound its way to a becomingly decorated landing, and then on up to the second floor. On the other side wide doors opened into the parlors whose mantels were graced with well filled vases of choice roses, the hearths banked with palms and ferns, and divers fine specimens of Mexican and other potted large-leaved plants were grouped in the corners. In the rear of the parlors the spacious dining-room was resplendent with flowers and plants, more especially the immense buffet which was deeply banked the entire length with variegated varieties of ferns crowned by adiantums, above which peered forth from the rear a wonderful line of American Beauty roses. The mantel, mirror, hearth and each corner of this room gave evidence of a liberal display of nature's beauty.

From the dining-room an archway of palms led into the ball room where flora seemed to reign supreme. From crystal chandeliers and gilded cornices of mirrors (of which latter there were no less than three of generous dimensions) hung garlands of *Asparagus tenuissimus* and other delicate varieties of trailing plants. Each mirror was flanked by clusters of

plants appropriately arranged. The high and long mantel with its wide hearth afforded a well utilized opportunity for floral display, while the four large wall spaces were graced by diamond shaped evergreen shields ten and fifteen feet, in the center of each of which arranged most effectively in fan shape were inserted long and clustering sprays of either the white or the pink flowering almond, supplemented by flowering cherry. This mural decoration was peculiarly effective by gaslight. The music alcove, library and refreshment room were all becomingly provided for in a floral way—even an enormous punch-bowl was ensconced in evergreen, and the cloak room appeared to be a fairy bow.

Altogether it was the most extensive and successful attempt here at floral decoration during the present season. X.

### A Good Flower Holder.

Instead of the usual pick and wire stemming of tulips, narcissus, etc., from the effects of which they wilt quickly if their pick stems are merely stuck into moss, use as holders round or oval pans, or even boxes that are metal lined, and six inches deep or more. Cover the outside with nice green sheet moss which is easily fastened on by No. 24 wire; if wound tightly the wire does not show. Partly fill inside of holder with sphagnum, arrange the flowers as you like, mostly standing straight (stemmed on picks is easiest of course); fill in green moss in finishing. On delivering your holder it is ready to be filled up inside with water and the flowers keep perfectly. If the holder is not too low, a garlanding of smilax caught up by bunches of flowers will improve its appearance. I have some sheet moss gathered last fall that has been kept perfectly in a sheltered area. It is rather a dry place and the moss too dry to freeze hard, but on wetting it freshens up very bright and green.

L. B. D.

SANTA BARBARA, CAL.—At the tenth annual Rose fair held April 10-12, a superb display of flowers and fruit was made. There was a special exhibit of named roses which comprised all the varieties in bloom here at the time.

SAN JOSE, CAL.—At a floral fair held here recently, there was a grand march of "Titled flowers," each couple representing and using a certain variety of flowers, principally roses. Over a hundred varieties of the latter were represented.

A LARGE BUNCH of white roses and lilies, a wreath of ivy leaves tied with purple ribbon, a wreath of pansies and a pillow of white roses, lilacs and lilies of the valley were among the flowers laid on the bier of the late Roscoe Conkling.

**THE AMERICAN FLORIST**

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 Cents a Line, Agate;  
Inch, \$1.40; Column \$14.00.  
Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per  
cent; 12 months, 20 per cent.

No reduction made for large space.

The Advertising Department of the AMERICAN  
FLORIST is for Florists, Seedsmen, and dealers to  
wards pertaining to those lines ONLY. Please to  
remember it.Orders for less than one-half inch space not accepted.  
☞ Advertisements for June 1st issue must  
REACH US by noon, May 5. Address.

THE AMERICAN FLORIST CO., Chicago.

**Catalogues Received.**Brackenridge & Co., Govanstown, Md.,  
orchids; Gardener's Nurseries, Byron,  
Neb., trees and plants; Jno. Curwen, Jr.,  
Villa Nova, Pa., plants; Thomas S. Ware,  
Tottenham, London, England, clematis,  
dahlias etc.SEEDLING PELARGONIUMS.—Mr. John  
Meyer, Loogootee, Ind., sends us blooms  
from four seedling pelargoniums. All  
are of very good colors, while one labeled  
No. 5 combines both size and rich color-  
ing. The trusses are not of very large  
size, but are presumably from quite young  
plants.LINDENIA.—The 8th and 9th numbers  
of Vol. 3 contain colored plates of  
Cypripedium Leeannum Lindl., Oncidium  
Chiephorum Rehb. f., Rodriguezia  
Bungerothi Rehb. f., Odontoglossum  
odoratum Lindl. var. baphicanthura Rehb.  
f., Cypripedium Moensianum Hort., C.  
Van Houtteanum Hort., C. Wallisi Rehb.  
f. and C. villousum Lindl.THE CROP OF IMMORTELLES.—We are  
informed that the severe frosts of this  
winter have injured the growing crop of  
immortelles in Europe to such an extent  
that the trade for the coming year will  
probably be supplied from old stocks  
only. The natural yellows have already  
advanced fully a hundred per cent.  
abroad, and if present reports are not  
exaggerated there will be a further ad-  
vance before next fall.**The Florists' Clubs.**The various Florists' Clubs of the coun-  
try are doing much to benefit the trade  
in the cities where they have been form-  
ed, and as the suggestion has been made  
that a directory of the various clubs, with  
the addresses of the secretaries, in the  
FLORIST would be of value in enabling  
the clubs to communicate with each other  
direct, we give a list below:Florists' Club of Philadelphia. D. D. L. Far-  
son, Sec'y, 55th and Westminster aves.  
Chicago Florists' Club, C. L. Grant, Sec'y, 54  
La Salle st.Gardeners and Florists' Club of Boston. J. H.  
Dillon, Sec'y, 20 Dorchester Mass.  
Baltimore Florists' Club, Wm. McRoberts,  
Sec'y, Govanstown, Md.New York Florists' Club. W. S. Allen, Sec'y,  
36 East Twenty Third St.  
Wisconsin Gardeners and Florists' Club.  
Frank Hall, Sec'y, 412 Grand Ave., Milwaukee.Society of Indiana Florists. Wm. G. Berter-  
good, Sec'y, 37 Market St., Indianaapolis.  
Detroit Florists' Club. J. F. Sullivan, Sec'y,  
805 Gratiot ave.St. Louis Florists' Exchange. Luther Arm-  
strong, Sec'y, Kirkwood, Mo.  
Florists and Gardeners' Club of London, Ont.  
Geo. Griffin, Sec'y.Florists and Gardeners' Club of Montreal,  
Quebec. Walter Wilshear, Sec'y, care of Park  
Avenue Nursery.Gardeners and Florists' Club of New Bedford,  
Mass. Geo. Bliss, Sec'y.Society of Minnesota Florists. Walter A.  
Smith, Sec'y, 624 Nicollet ave., Minneapolis.  
Kentucky Florists' Society. H. J. Lichteild,  
Sec'y, 517 E. Gray st., Louisville.**Wholesale Markets.****Cut Flowers.**

Roses, Teas	12.00 @ 15.00
" Mermetts, Perles	6.00
" Niphetos, Gontiers	4.00
Violets	25 @ .50
Pansies	1.00
Lily of the valley, narcissus	1.00
Tulips, hyacinths	1.00
Carnations, long	1.50
Carnations, short	1.00
Carnations, fancy	2.00
Callas, Harristill	10.00
Mignonne	25.00
Adiantums	1.50

NEW YORK, May 9.

Roses, Bon Silene	2.00 @ 3.00
" Gontiers	3.00 @ 4.00
" Perles, Niphetos, Souvs	3.00 @ 4.00
" Mermetts, Brides, Cousins	6.00
" La France	6.00 @ 8.00
" Bennetts	4.00
" Am. Beauty, Puritan	15.00 @ 25.00
" Jacqu	10.00 @ 12.00
Carnations	1.00 @ 1.50
Smilax	3.00 @ 4.00
Lily of the valley, tulips	1.00 @ 1.50
Violets	25 @ .50
Callas	6.00 @ 10.00
Adiantums	5.00 @ 8.00

CHICAGO, May 10.

Roses, Perles, Niphetos	8.00 @ 10.00
" Bon Silenes	1.50 @ 3.00
" Mermetts	4.00 @ 6.00
" Brides	5.00 @ 7.00
" La France	4.00 @ 6.00
" Am. Beauties	10.00 @ 15.00
" Jacqu	10.00 @ 12.00
Carnations, short	.75 @ 1.00
Carnations, long	1.00 @ 1.50
Smilax	25.00
Lily of the valley, daffodils	3.00 @ 4.00
Adiantum ferns	2.00 @ 4.00
Violets	1.00
Callas	6.00
Candium lilies	4.00 @ 8.00

PHILADELPHIA, May 9.

Roses, Teas	12.00
" Perles, Niphetos	4.00
" Mermetts, Bennetts	6.00
" Jacqu	10.00
" La France, Nels	6.00
" Am. Beauty, Magna Charta	20.00
" Puritan	15.00
" Mixed hybrids	10.00
Carnations	1.00
Smilax	2.00
Lily of the valley	4.00
Harristill lilies	8.00
Candium lilies	5.00
Double Violets	.50
Callas	8.00

**WM. J. STEWART,  
Cut Flowers and Florists' Supplies****WHOLESALE**

67 BROMFIELD ST., BOSTON, MASS.

**CHAS. E. PENNOCK,  
WHOLESALE FLORIST,**38 So. 16th STREET,  
PHILADELPHIA, PA.

Member American Florist.

**CUT FLOWERS AT WHOLESALE  
N. F. MCCARTHY & CO.  
WHOLESALE FLORISTS,**

63 Bromfield St., under Hort. Hall, Boston, Mass.

We have made large contracts with the best Rose  
growers about Boston to handle their entire stock  
this season. Our stock will consist of Papa Gontier,  
Bennett, Fiebig, Guillott, American Beauty, Mer-  
metts, La France, Malmesbury, Cook, Bride, Niphetos,  
Perle, Nels, Anna Webb and Grace Wilder pinks,  
long stems; other flowers in variety. We shall have  
a particularly large lot of Mermetts and Perles, so  
that in sending to us when you fail to get them else-  
where you will feel reasonably sure of getting them.  
Unknown parties must give satisfactory reference  
or let us send C. O. D. Write for information.**10,000 LILACS**6c. per cluster or bunch.  
Discount on large orders.  
Terms cash, or flowers will  
be shipped C. O. D. Season  
generally extended from  
May 15 to June 1. Please  
order before season com-  
mences.

L. B. BRAGUE, Hinsdale, Mass.

**Thos. Young, Jr., & Co.,****Wholesale Florists,**

INCORPORATED 1885,

20 W. 24th St., NEW YORK.

**W. S. ALLEN,****WHOLESALE DEALER IN CUT FLOWERS,**

36 EAST 23rd STREET, NEW YORK.

ESTABLISHED 1877.

Price List sent upon application.

**LaRoche & Stahl,  
Florists & Commission Merchants  
—OF—  
CUT FLOWERS,**1237 Chestnut Street, PHILADELPHIA.  
Consignments Solicited. Special attention paid to  
shipping. Mention AMERICAN FLORIST.**C. STRAUSS & Co.,**

TELEPHONE 877. WASHINGTON, D. C.

**WHOLESALE ROSE GROWERS  
AND DEALERS.**LARGE STOCK OF ALL THE NEW ROSES.  
Orders booked for young stock at special rates.**HAMMOND & HUNTER,**

Wholesale dealers in

**Cut Flowers and Florists' Supplies**

61 West 30th Street, NEW YORK.

**WELCH BROS.,  
WHOLESALE FLORISTS,**165 Tremont Street, BOSTON, MASS.  
We make a specialty of shipping choice Roses and  
other Flowers, carefully packed, to all points in  
Western and Middle States.  
Return Telegram is sent immediately when it  
is impossible to fill your order.**KENNICOTT BROS.,  
WHOLESALE FLORISTS.**

ALL CUT FLOWERS IN SEASON.

Write for price list. Consignments solicited.

27 Washington Street, CHICAGO.

**CUT FLOWERS**The choicest Cut Flowers at lowest market rates  
shipped C. O. D. Telephone connection. Use A. F.  
code when ordering by telegraph. For prices, etc.,  
Address.

J. L. DILLON, BLOOMSBURG, PA.

**M. MALSH,**

206 S. Halsted Street, CHICAGO.

**WHOLESALE DEALER IN****CUT FLOWERS,  
AND GROWERS' AGENT.**

Regular shipping orders especially solicited.

**EVERY FLORIST SHOULD HAVE****OUR TRADE DIRECTORY**

Price only One Dollar.

AMERICAN FLORIST CO., 54 La Salle St., Chicago.



## The Seed Trade.

SEED TRADE ASSOCIATION.—William Meggat, president, Wethersfield, Conn.; Albert M. McCullough, secretary, Cincinnati, O.

W. Atlee Burpee sailed for Europe March 5.

THE SIXTH ANNUAL CONVENTION of the Seed Trade Association will be held in Chicago, beginning Tuesday, June 12.

A rate of one and one-third fare for the round trip has been secured from the railroads, for those who attend the meeting.

The Sherman house has been selected as headquarters for the coming meeting. It is expected that the sessions of the organization will be held in the hotel club room.

SYRACUSE, N. Y., May 7.—In the case of James Vick of Rochester versus Postmaster Carr at Suspension Bridge, United States Judge Wallace to-day continued the injunction forbidding the latter from interfering with packages of bulbs, seeds or plants sent through the mails by the plaintiff from Canada to persons in the United States upon a rate of postage of one cent for four ounces which has been prepaid in Canadian postage stamps by rating them up to the United States rate of one cent per ounce, which they would have to pay if mailed to the same persons on this side of the line.—*Chicago Tribune*.

### Bill Nye on the Seedsman.

Twenty years ago you could plant a seed according to directions, and it would produce a plant which seemed to resemble in a general way the picture on the outside of the package. Now, under the fluctuating influences of irresponsible isotherms, phlegmatic springs, rare June weather and overdone weather in August, I find it almost impossible to produce a plant or vegetable which in any way resembles its portrait. Is it my fault or the fault of the climate? I wish the club would take hold of this at its next regular meeting.

I first noticed the change in the summer of '72, I think. I purchased a small package of early Scotch plaid curled kale with a beautiful picture on the outside. It was as good a picture of Scotch kale as I ever saw. I could imagine how gay and light-hearted it was the day it went up to the studio and had its picture taken for this purpose. A short editorial paragraph under the picture stated that I should plant in quick, rich soil, in rows four inches apart, to a depth of one inch, cover lightly, and then roll. I did so. No farmer of my years enjoys rolling any better than I do.

In a few weeks the kale came up, but turned out to be a canard. I then waited two weeks more, and other forms of vegetation made their appearance. None of them were kale. A small delegation of bugs which deal mostly with kale came into the garden one day, looked at the picture on the discarded paper, then examined what had crawled out through the ground, and went away. I began to fear then that climatic influences had been at work on the seeds, but I had not fully given up all hope.

At first the plants seemed to waver and hesitate over whether they had better be wild parsnips or lima beans. Then I concluded that they had decided to be foliage plants or rhubarb. But they did

not try to live up to their portraits. Pretty soon I discovered that they had no bugs which seemed to go with them, and then I knew they were weeds. Things that are good to eat always have bugs and worms, while tansy and castor oil go through life unmolested.

I ordered a new style of gladiolus eight years ago of a man who had his portrait in the bow of his seed catalogue. If he succeeds no better in resembling his portrait than his gladiolus did in resembling theirs, he must be a human onion, whose presence may be easily detected at a great distance.

Last year I planted the seeds of a watermelon which I bought of a New York seedsman who writes war articles winters and sells garden seeds in the spring. The portrait of this watermelon would tempt any man to climb a 9-rail fence in the dead of night and forget all else in order to drown his better nature and his nose in its cool bosom. People came for miles to look at the picture of this melon and went away with a pleasant taste in their mouths.

The plants were a little sluggish, though I planted them in hills far apart each way in a rich, warm loam enriched by everything that could make a sincere watermelon get up and hump itself. The melons were to be very large indeed, with a center like a rose. According to the picture these melons generally grew so large and plenty that most everybody had to put side-boards on the garden fence to keep them from falling over into other farms and annoying people who had all the melons they needed. I fought squash bugs, cut worms, Hessian flies, chinch bugs, curculio, mange, pip, drought, dropsy, caterpillars and contumely till the latter part of August, when a friend from India came to visit me. I decided to cut a watermelon in honor of his arrival. When the proper moment had arrived and the dinner had progressed to the point of fruit, the tropical depths of my garden gave up their season's wealth in the shape of a low-browed citron about as large and succulent as a hot ball.

I have had other similar experiences, and I think we ought to do something about it if we can. I have planted the seed of the morning glory and the moon flower and dreamed at night that my home looked like a florist's advertisement, but when leafy June came a bunch of Norway oats and a hill of corn were trying to climb the strings nailed up for the use of my non-resident vines. I have planted with song and laughter the seeds of the ostensible pansy and carnation, only in tears to reap the bachelor's button and the glistening foliage of the sorghum plant. I have planted in faith and a deep, warm soil, with pleasing hope in my heart, and a dark-red picture on the outside of the package, only to harvest the low, vulgar jimson weed and the night-blooming bull thistle.

Does the mean temperature or the average rainfall have anything to do with it? If statistics are working these changes they ought to be stopped. For my own part, however, I am led to believe that our seedsman put so much money into their catalogues that they do not have anything left to use in the purchase of seeds. Good religion and very fair cookies may be produced without the aid of caraway seed, but you cannot gather nice fresh train fins of thistles or expect much of a seedsman whose plants make no effort whatever to resemble their pictures.—*N. Y. World*.

## Floriculture for Women.

The diffuse writers on "Woman's Work" in the daily press and monthly magazines have hit upon floriculture as the occupation par excellence for women, and the awful ignorance of the subject displayed by these self-elected "teachers" is appalling. Their "teachings" are not merely ridiculous, but they are a menace to many unfortunate ladies who may be induced by them to invest their scanty capital in a venture which is absolutely certain to prove a failure in their hands.

These writers tell us of poor women becoming successful and "wealthy" florists in a "few years." Where are they? If in existence, they have accomplished something that no "horrid man" has been able to do. They tell us nothing of the hard work and continued application necessary to attain even moderate success; instead, they tell us of the "\$10,000 decorations" and "immense profits" made by florists, and that "this Golconda mine is at the feet of women, ready for them to open and enjoy."

While there may be a place for women in the trade, such as arranging flowers and selling the same over the counter, there is certainly none in the growing of plants and flowers. Imagine a dainty woman climbing around stoke-holes after midnight and shoveling coal into a furnace, climbing up onto the roof to replace a broken light of glass, lugging in potted soil in a box, or watering, with her skirts dripping wet. How long would she last? To be sure, women do these things in some other countries, but it is not expected and not necessary in this. The production of "these lovely children of nature" is a decidedly prosaic matter, and it is the duty of every one in the trade to do his utmost to counteract the influence of the writings above referred to. People should be made to understand that the production of plants and flowers in *paying quantities* is the result only of the same amount of care and skill as is necessary to success in any other profession, and that without them failure is sure to result. G.

A GOOD TEMPORARY SHADE used by Supt. Kanst, South Park, Chicago, is made from common clay and water, applied to the glass when about the consistency of white-wash. It can be very easily rubbed off and is very useful in early spring when a shade is required, but it is desirable that it can be readily removed in case the weather changes. For a permanent summer shade he uses white lead and benzine, but finds the clay very useful at times before the summer shade is put on, especially on hot-beds and frames.

GEO. F. SYLVESTER who sent a renewal of subscription to our New York office without either dating letter or giving address will please send us the missing details.



**TRY DREER'S GARDEN SEEDS**

Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free. HENRY A. DREER, Philadelphia

**PAPER SEED BAGS,**

For Flower and Vegetable Seeds  
CLARK BROTHERS, Manufacturers, 61 Ann St., N. Y.

# FORCING BULBS

FOR

Fall Delivery.

# NARCISSUS

AND OTHER

FORCING BULBS

For Fall Delivery

All Good Flowering Bulbs.

OF NARCISSUS I SHALL HAVE ABOUT  
TWO MILLIONS READY FOR  
FALL DELIVERY.

Narcissus Albicans, the best of the single white trumpets, 45¢ per 100.  
Narcissus Bicolor Empress, the queen of the bi-color daffodils, enormous flowers, 95¢ per 100.  
Narcissus Bicolor Grandis, similar in color to Horsfieldi, but having larger flowers and blooming later, 65¢ per 100.  
Narcissus Bicolor Horsfieldi, one of the largest and best for cutting, 65¢ per 100.  
Narcissus Bulbocodium, the Hoop Petticoat daffodil; very fine, strong bulbs; 65¢ per 100; 55¢ per 1000.  
Narcissus Bulbocodium Citrinus, like the yellow Hoop Petticoat, but with pale sulphur-yellow flowers, 75¢ per 100; 65¢ per 1000.  
Narcissus Golden Spur, very large deep yellow flowers and early blooming; one of the best; 45¢ per 100.  
Narcissus Henry Irving, one of the best deep golden yellow trumpets, 65¢ per 100.  
Narcissus Incomparabilis Cynosure, a beautiful single Incomparabilis for cutting, yellow cup, divisions creamy white, 85¢ per 100; 70¢ per 1000.  
Narcissus Incomparabilis Stella, large single white variety, very early, fine for cutting, 85¢ per 100; 70¢ per 1000.  
Narcissus Major, true, one of the best forcing sorts, large yellow trumpet, similar to maximum, 95¢ per 100; 80¢ per 1000.  
Narcissus Nobilis, a first-class variety for florists, free and early, 75¢ per 100; 60¢ per 1000.  
Narcissus Obvallaris, the true Tenley daffodil, one of the best varieties, forcing deep rich yellow flowers of great substance, 85¢ per 100; 70¢ per 1000.  
Narcissus Odonus Campenelle, the well-known Campenelle jonquil, very strong bulbs, 55¢ per 100; 45¢ per 1000.  
Narcissus Orange Phoenix, large double white flowers with orange center, good for cutting, 95¢ per 100; 80¢ per 1000.  
Narcissus Pallidus Præcox, the earliest of all; forces very freely; single sulphur-colored trumpets, 75¢ per 100; 60¢ per 1000.  
Narcissus Poeticus Ornatus, the early white poet's Narcissus, the best of the Poeticus section for forcing and for cutting, 85¢ per 100; 70¢ per 1000.  
Narcissus Poeticus Plenus, the double white Narcissus, 45¢ per 100; 30¢ per 1000.  
Narcissus Principes, one of the best forcing sorts; soft pale yellow trumpets, 95¢ per 100; 80¢ per 1000.  
Narcissus Rugilobus, true, large yellow trumpet, very free and very early, 145¢ per 100; 120¢ per 1000.  
Narcissus Scoticus, the Scotch Garland daffodil, a beautiful variety both for borders and for forcing, 65¢ per 100; 40¢ per 1000.  
Narcissus Von Sion, true, the double deep yellow daffodil, 55¢ per 100; 40¢ per 1000.  
And many other first-class sorts. List of varieties and price I should be happy to furnish on application.  
Anemone Fulgens, true, fine strong English grown tubers, 75¢ per 100; 60¢ per 1000.  
Chionodoxa Lucille, true, beautiful blue flowers in early spring, 25¢ per 1000.  
Freesia Refractor Alba, one of the best modern plants for forcing, pure white, sweetly scented flowers, 75¢ per 100; 65¢ per 1000.

# THOS. S. WARE,

HALE FARM NURSERIES,

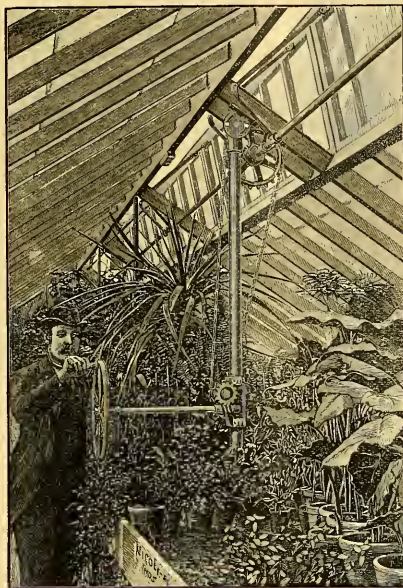
Tottenham, London, England.

# THE EVANS CHALLENGE VENTILATING APPARATUS.

Security in case of storms.

Without a rival either in Cost, Speed in Operating or

\* \* \* \* \*



WHEN WRITING FOR ESTIMATES, PLEASE GIVE FOLLOWING DIMENSIONS:

- 1st. Give the number of sashes to be lifted.
- 2nd. Give the length and depth of sashes (depth is down the roof).
- 3rd. Give the length of house.
- 4th. Give the height from the ground to the comb of roof.
- 5th. Give the thickness and width of rafters or sash bar.

—: MANUFACTURED BY:—

QUAKER CITY MACHINE CO.,

1108 &amp; 1110 NORTH E STREET,

RICHMOND, IND.

## ROEMER'S SUPERB PRIZE PANSIES.

The Finest Strain of Pansies in the World.  
Introducer and Grower of all the leading Novelties.

Catalogue free on application.

FRED. ROEMER, SEED GROWER.  
QUEDELINBURG, GERMANY.

Irish Junipers, 2 to 3 feet.....per 100 \$15 00  
Peonies.....per 100 \$5.00; per 1,000, 45.00  
Climbing Roses in var.....per 100, 5.00  
Hardy Roses in var.....per doz. \$3.00  
Clematis.....per doz. \$3.00  
Choice 2-year old grape vines: Niagara, Worden, Jefferson, L. Washington, Naomi, Prentice, Pocklington, Vergennes, Brighton, Moore's Early, etc., \$2.00 per ten. 1-year old vines, one-half price.  
Hardy Clematis Bella Viticella, etc., \$1.00 per doz.; \$5.00 per hundred.

F. A. BALER, Bloomington, Ill.

Rooted Cuttings of leading sorts Coleus, strong and clean.....per 100, \$ 1.25  
Rooted Cuttings, 51 per 100 extra potted..... 75  
Swanley White Violets..... 4.00  
Viner Major var., 2 1/2 in. pot.....per 1,000, 10.00  
Tuberose Bulbs, 4 in. circum. & over.....per 1,000, 10.00  
" 4 in. to 4 1/2 in. circum..... 5.00  
" sets, clean.....per bu. 3.00  
Begonia Saundersiana, 4 in. pots.....per 100, 5.00  
" Metalia.....per 100, 5.00  
" extra..... 10.00  
Heliotrope, Chieftain, best market sort..... 3.00  
Bouvardia, Davidsoni, best single white..... 3.00  
Send for trade list of general florist stock.

JOHN CURWEN, Jr., Villa Nova, Pa.

## VERBENAS

From 2-inch pots, well furnished with cuttings. First-class, per 100, \$15.00. Address:  
J. G. BURROWS, FISHKILL, N. Y.

## THE BEST AND CHEAPEST DOUBLE PETUNIA SEED

(P. hybrida grandiflora fl. pl.)

in the market. For sale to the trade by the grower.

G. A. McTAVISH,

NORTH SAANICH, B. C., CANADA.

Mention American Florist.

## Florist's Letters.

PATENT APPLIED FOR.  
These letters are made of the best enamelled, wired on holes or metal frames with holes to insert toothpicks.

Prices on Wood Frames:  
2-in. purple.....per 100, \$3.00  
2 1/2-in. .... 4.00  
Send for sample. Postage 10c. per 100. Script lettering on Metal Frames any word, 5c. per letter.

Designs, Monograms, Etc.

W. C. KRICK,

1107 Broadway, Brooklyn,

New York.

M. M. Bayersdorfer &amp; Co.,

Phil., Agts. for Penna.

J. C. VAUGHAN, Chicago,

Agt. west of Pennsylvania.

## THE ILLUSTRATED

## Dictionary of Gardening

A Practical and Scientific Encyclopædia  
of Horticulture for Gardeners  
and Florists.

EDITED BY GEO. NICHOLSON,

of the Royal Botanic Gardens, Kew, England.

A most valuable work of reference for florists and all interested in horticulture.

PRICE, for the set of seven handsomely bound volumes, \$21.00.

JAMES A. PENMAN,

12 Dey Street, NEW YORK.

Sole Agent for the United States and Canada.

Orders may also be addressed to the

AMERICAN FLORIST CO.,

54 La Salle Street, CHICAGO



## Another Heavy Easter Order.

A Canadian florist writes: "I hope Mr. Rawson won't think I am trying to undermine his reputation as a story teller, but I think an order I received at Easter for '25 cents worth of smilax to decorate a church and mix with paper flowers' rather goes him one better."

I FIND GALVANIZED WIRE CLOTH, in several weights and sized meshes a very convenient article to use in forming the many odd designs one seems perforce obliged to turn out. It helps much to fill the void of a wire worker at your beck. After accustoming one's self to its utility it is surprising how readily it fits into frequent use. L. B. D.

THE AMERICAN ASSOCIATION OF NURSEYMEN will hold its thirteenth annual meeting at Detroit, Mich., beginning Wednesday June 20, at 10:30 A. M., and continuing three days. Hotel headquarters will be at the Michigan Exchange where a special rate of \$2 a day has been secured. An interesting and varied programme is being prepared, and the usual question box will be provided. The names of all who become members previous to June 4, will be printed in the badge book. Further particulars may be procured from D. Wilmot Scott, Secretary, Galena, Ill.

## EXTRA BULBS

— OF —

## Freesia Refracta Alba Odorata

## NOW READY.

EXTRA SIZE, largest ever offered.....	Per 100 \$ 4.00
No. 1 BULBS, large size.....	2.50
No. 2 BULBS, good size.....	1.50

For Delivery in September.

ROMAN HYACINTHS,  
DUTCH HYACINTHS,  
LILIUM CANDIDUM,  
LILIUM HARRISII,  
LILIUM LONGIFLORUM,  
PAPER WHITE NARCISSUS.

And all Bulbs used by Florists at proper season.

Send for Wholesale Price List ready in September.

SCHLEGEL & FOTTLER,  
BOSTON, MASS.

## DUTCH BULBS!

G. V. VAN ZANTEN & CO.,  
WHOLESALE BULB GROWERS,  
Hillegom, Haarlem, Holland.

ESTABLISHED 1862.

Our stocks are selected with the greatest care for the American trade.

Price list free on application—before ordering write for one.

**HULSEBOSCH BROS.,**  
Dutch Bulb and Plant Growers,  
OVERVEEN, in HAARLEM, HOLLAND,  
SUPPLY THE TRADE.

Address for the United States, P. O. Box 3118 New York City. Wholesale Catalogue on application.



## IMPORT BULB PRICES.

We are Large Dealers in all

## FORCING BULBS.

And ask the opportunity to make prices on your list.

Please write us for Estimates now.

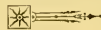
**J. C. VAUGHAN,** <sup>80X</sup><sub>688</sub> CHICAGO.

WE ARE NOW BOOKING ORDERS FOR  
HYACINTHS, TULIPS, Single and Double NARCISSUS, Etc.

## SEEDSMEN AND FLORISTS

Importing direct should write us for prices. Special rates to large buyers. Largest stock of

Hyacinths, Tulips, Polyanthus, Single and Double Narcissus, Narcissus Bicolor  
Horsfieldi, Poets Ornatus, Trumpet Major, Double Von Sion.



**R. VAN DER SCHOOT & SON,**  
Bulb Growers,

HILLEGOM, near Haarlem, HOLLAND.



## LAWN GRASS SEED

Neatly put up in pound and half pound boxes for florists' retailing. PRICES, \$2.25 and \$1.25 per doz. pkts., or in bulk at \$2.00 per bushel.

**LILY AURATUM, DAHLIAS,**  
—) AND ALL SPRING BULBS. (—

Choice Seeds for MARKET GARDENERS' and FLORISTS' use.

Send for Catalogue and Trade List.

**JAMES KING.**

170 Lake St. CHICAGO.



TRADE MARK.

**POLMAN MOOY,**

WHOLESALE ONLY.  
Largest growers of

HAARLEM,  
HOLLAND.

## DUTCH BULBS,

NO AGENTS.

Hyacinths, Tulips, Crocus, Narcissus, Ranunculus, Anemones, Lilium, Spirea, Lily of the Valley, Dietria.

## HEADQUARTERS FOR FORCING BULBS.

The only warehouses facing the waterside with all the latest improvements for packing, drying and export.

## PRICES LOW.

## DUTCH BULBS, ROMAN HYACINTHS,

Lilium Candidum and Harrisii, Freesias, Paper White Narcissus, etc.

From the BOSKOOP HOLLAND NURSERY ASSOCIATION, HARDY LOW BUDED DWARF

ROSES, TREE ROSES, RHODODENDRONS, Azaleas, Lilacs, Hydrangeas;

EXTRA STRONG CLEMATIS, ETC., ETC.

Catalogues for Fall Importation now ready.

ADDRESS:

**C. H. JOOSTEN, Importer,**

3 Coenties Slip, NEW YORK.

10,000

**ECHEVERIAS SECUNDA GLAUCA**

Per hundred, \$3.00.

CHARLES HEINZ, SHARON, PA.

Headquarters for Jersey Yellow and Nansemond

**SWEET POTATO PLANTS.**

\$1.50 per 100 in May, and \$1.00 per 1,000 in June.

FREEMAN BURET, Swedesboro, N. J.

Mention American Florist.

**AUGUST RÖLKER & SONS,**  
44 Dey St., NEW YORK,  
Supply the Trade with  
**SEEDS, BULBS,**  
And all kinds of  
**FLORISTS' SUPPLIES.**

Revised Price List mailed on application.

**BULBS, IMMORTELLES.**  
**J. A. DE VEER,**  
(Formerly of DeVeer & Boomkamp.)

19 Broadway, New York

SOLE AGENT FOR  
THE GENERAL BULB CO., Vogelenzang, (Holland).  
Ls. BREMOND FILS, Ollioules, (France.)

Offers to the trade, net without engagement, for prompt or Spring delivery.

	Per 100.	Per 1000
Lilium Auratum, large bulbs.....	\$3.00	\$30.00
Excelsior Pearl Tuberoses, extra.....	1.75	15.00
First size.....	1.50	12.00
Gladioli, large bulbs, fine mixed.....	1.50	12.00
Brenchleyensis.....	.40	7.50
scarlet & crimson.....	1.00	9.00
pink & variegated.....	1.75	15.00
white and light.....	2.25	20.00
yellow and yellow.....	2.50	22.50
Hyacinthus Candicans, large.....	2.50	20.00
per 100 per doz.....	15.00	2.25
in separate colors.....	12.00	1.75
in fine mixture.....	9.00	1.25
Cannas.....	5.00	.75
in fine named sorts.....	7.50	1.20
Caladium Esculentum, large bulbs.....	12.00	1.75
good sized bulbs.....	7.00	1.00
CLEMATIS JACKMANI and other sorts, Dutch grown, 2 to 3 years old, strong roots.....	35.00	4.50

QUOTATIONS ON ROMANS.  
PAPER WHITE NARCISSUS.  
LILUM CANDIDUM, ETC.  
NEW CROP, GIVEN ON APPLICATION.  
Have Removed to 183 Water St.

## Summer Flowering BULBS.



	Per 100
Amaryllis Formosissima.....	\$15.00
Caladium Esculentum.....	6.00
Cooperia Pedunculata.....	5.00

### GLADIOLUS

CHOICE NAMED VARIETIES.	
Our Selection.....	10.00
Very good Standard named varieties.....	6.00
Mixed Reds and Scarlets.....	1.50
" Pink and variegated.....	2.00
" Whites and light shades.....	3.00
" Yellows.....	4.00
New American Hybrids mixed.....	2.00
Good mixed, all shades.....	1.50
HYACINTHUS CANDICANS, \$5.00 per hundred.	
RICHARDIA (SPOTTED CALLA), \$0.00 per hundred;	
Extra strong, \$10.00 per hundred	

**MICHEL PLANT AND SEED CO.**

718 Olive Street,  
ST. LOUIS, MO.

Mention American Florist.

## OUR WHOLESALE CATALOGUE

— OF —

# BULBS

Of all Sorts,

## CHRYSANTHEMUMS, &c.

Is now ready. Will be sent to all applying that we know to be engaged in the trade—or to any furnishing us evidence, as cards, letter-heads or bill-heads.

**V. M. HALLOCK & SON,**  
**QUEENS, NEW YORK.**

**F. E. McALLISTER,**

— WHOLESALE DEALER IN —

Seeds For the Florist Requisites Bulbs For the Green-house or Garden.

22 Dey Street, - - - NEW YORK.

## SEGERS BROTHERS, GROWERS OF HOLLAND BULBS.

OUR SPECIALTIES ARE:

Holland Hyacinths and Tulips, in any quantity; also Crocuses, Narcissus, Daffodils, Lilliums, Lily of the Valley, Gladiolus The Bride, Anemones, Ranunculus, Spiræa Japonica, etc.

References as to quality of our Bulbs, etc., to several United States Florists and Seedsmen.

Our Wholesale Catalogue is now Published.

PLEASE DO NOT DELAY TO SEND YOUR ORDER.

**LISSE. NEAR HAARLEM, HOLLAND.**

WHOLESALE ONLY.

NO AGENTS.

**SEEDS, BULBS, PLANTS,**  
SUPERIOR NORTHERN GROWN.  
**CURRIE BROS., SEEDSMEN AND FLORISTS,**

Send for Catalogue.

**MILWAUKEE, WIS.**

## DUTCH HYACINTHS.

Our Wholesale Catalogue for the coming season of

**DUTCH HYACINTHS, TULIPS, NARCISSUS,**  
AND ALL OTHER BULBS AND BULBOUS ROOTS

Is now ready. Don't forget to forward a postal card if you want one, as there is a great reduction in prices of

*Hyacinths, Narcissus, Gladiolus, and other worth-growing Bulbs and Roots.*

**SEGERS & CO.,**

BULB GROWERS,

**LISSE, near HAARLEM, (Holland.)**

**APPLE GERANIUM SEED.**

Per hundred, 46c; three hundred, \$1.00 one thousand, \$3.00; ten thousand, \$25.00.

Seeds put up in packets of 100 each, and will be ready for delivery in June, 1888. Address

**BROTHERS' INDUSTRIAL GARDENS,**

MOBILE, ALA.

(Firebrand, J. Goode, Per 100 Per 1000)

COLEUS, Golden Bedder, and 10 others varieties.....\$ 3.00 \$25.00

Alternanthera aurea nana, pots..... 2.00 15.00

Rooted Cuttings, strong; good as plants..... 7.50

25¢ Cash with order.

**JOHN J. CONNELLY, Bryn Mawr, Pa.**



All For Two Cents.

While endeavoring recently to digest the contents of the *New York World*, I was attracted by the advertisement of a gentleman doing business in Pennsylvania, and offering to send a "floral guide" and package of flower seeds "containing 500 varieties," to any person remitting two cents. I lost no time in forwarding the stipulated amount, and a few days later I was in possession of the guide and the seeds. There was nothing particularly characteristic about the book; and the package of seeds, which was about the size of an ordinary 5 cent packet, was probably half filled; apart from the assurance that it contained 500 varieties—a statement very liable to mislead some people—there was nothing to convey any precise knowledge of its contents. So that the most pleasing feature of the whole affair would naturally be the delightful state of anticipation in which each recipient will exist from the time the package is received until the nature of its contents are fully disclosed, and the door yard is converted into a pocket edition of Paradise.

Now I do not for a moment desire to insinuate that the party sending out these seeds is guilty of any willful intent to deceive; I raise no doubts as to the package of flower seeds containing 500 varieties, such a thing is quite possible—I believe the gentleman to be quite as conscientious in the matter, perhaps more so, than many people who make similar offers—but I always regard such methods as calculated to interfere with the profits derived from legitimate trade operations, and as very prejudicial to trade interests; I entertain the same opinion regarding the collection of seeds placed for sale in grocery and drug stores; the seeds are seldom reliable, and the system is beneficial only to those personally interested, and I can't avoid expressing in some measure the enmity I feel towards any system, or practice, which according to my lights, I regard as unfavorable to the interests of the trade at large. In many instances persons making attractive offers such as I have alluded to, claim that they are moved by a desire to create and nourish a taste for floriculture amongst the masses, but it is quite unnecessary to cheapen present prices of plants or seeds, in order to place them within the reach of all who desire them; it is not necessary to give away our goods in order to foster public taste.

Baltimore. A. W. M.

SPLENDID OFFER.

Roses, Teas, in 2-inch pots, forcing kinds.....	Per 100 \$ 3.00
"Hybrids, in 2½-inch pots.....	5.00
Fuchsias, 2-inch pots, new varieties.....	3.00
Coleus, 2-inch pots, new varieties.....	2.00
Carnations, Hinz's White, in flats.....	2.00
Ivies, ass't., 2-inch pots.....	3.00
Flowering Plants in Bloom and Bud, Geraniums, Fuchsias, Roses, Heliotropes, Feverfews, Begonias, etc., 4-inch pots, \$1.50 per doz.	5.00

A. GIDDINGS, DANVILLE, ILL.

HIGLEY'S TRADE LIST OF SEEDS, PLANTS, BULBS

AND FLORISTS' REQUISITES

Now out. If you do not receive one, send for it. Address

HENRY G. HIGLEY,  
CEDAR RAPIDS, IA.

TUBEROSE BULBS.

LARGE, DOUBLE-FLOWERING, TALL.

12 sent by mail for.....	\$ .50
100 by express for.....	2.00
1,000 by express or freight.....	10.00
100 Sets by mail for.....	25.00
1,000 Sets by express for.....	10.00

Address HENRY GULICK,  
SUMMIT, FLORIDA.

# SURPLUS STOCK.

GERANIUMS, ROSE GERANIUMS and HELIOTROPES in best var. from 4-inch pots 6 cents, 2-inch pots, 3 cents each.  
VERBENAS, PANSIES, ENGLISH IVY, CARNATIONS, COLEUS, ALTERNANTHERAS, ACHYRANTHUS, BEGONIAS, (flowering) VIOLETS, FUCHSIAS AND SEEDLINGS OF ANNUALS, all in best var., from 3-inch 5 cents, 2-inch 3 cents each.  
ROSES, La France, Niphetos, Bride, Mermets, Safrano, Bon Silene and Marie Van Houtte, from 4-inch pots 15 cents, 3-inch 8 cents, 2-inch 4 cents each.  
ROOTED CUTTINGS OF ALTERNANTHERAS at \$1 per hundred.

## ORNAMENTAL PLANTS.

DRACENAS AND CROTONS, best varieties 4 and 5-inch pots 25 to 40 cents each.  
PALMS—Corypha Australis, Phoenix reclinata, 6-inch 75 cents each. Kentias, Cocos Weddelliana and Brahea glauca, 4 and 5-inch pots 50 cents each.  
CLEMATIS, PASSIFLORAS AND OLEANDER, 6 best var., from 5-inch pots 50 cents each.

Other Ornamental Plants, See adv in Am. Florist, April 15.

EGG PLANTS, New York improved, from 3-inch pots 3 cents each. Also RHUBARB.

## N. STUDER,

ANACOSTIA P. O., WASHINGTON, D. C.

## WESTERN FLORISTS

	1 OFFER NOW	Per 100
3,000 Assa Gray Geraniums, fine, stocky plants.....	\$ 3.00	
3,000 Gen. Grant Geraniums.....	3.00	
2,000 Mrs. M. E. Page Geraniums, pale, scarlet.....	3.50	
5,000 Geraniums, in 10-inch bedding varieties.....	3.50	
3,000 Rose Geraniums, strong plants.....	3.00	
2,000 Dr. Livingstone Rose Geraniums.....	5.00	
5,000 Hinz's White Carnations, ready for planting out.....	3.00	
5,000 Verbenas, 12 distinct varieties.....	2.50	
8,000 Coleus, 15 choice varieties.....	2.50	
3,000 Smilax, thrifty young plants.....	2.50	
5,000 Chrysanthemums, 10 to 30 choice kinds.....	3.00	
1,000 Abutilons, 5 varieties.....	4.00	
3,000 Alternanthera, aurea nana, and 2 other varieties.....	3.00	
2,000 Tigridia Conchiflora.....	2.50	
2,000 Paris Daisy (Chrysanthemum Frutescens).....	5.00	
2,000 Daisies, White and Golden Yellow.....	2.50	

Address N. S. GRIFFITH,  
JACKSON CO. INDEPENDENCE, MO.  
(Independence is well located for shipping, being 8 miles east of Kansas City.)

## WESTERN FLORISTS

And any others who want  
*Cheap, Strong and Healthy Plants,*

— SEND FOR —  
ROBT. BROWN & SON'S SPRING TRADE LIST.  
All leading plants at low prices in large or small quantities.

GERANIUMS and COLEUS, new and old.  
ALTERNANTHERAS by the thousand.  
ECHEVERIAS by the hundred or thousand.  
BEGONIAS in twenty leading kinds.  
— ALSO MANY NOVELTIES. —  
Stock all in good, clean, healthy condition.

ADDRESS  
ROBT. S. BROWN & SON,  
Box 99 KANSAS CITY, MO.  
Mention American Florist.

## PLANTS TO THE TRADE

	Per 100
Anemopsis Veltchii, strong plants.....	\$ 5.00
Paeonia Constance Elliott, 3-in. pots.....	8.00
Begonia semip. gigantea rosea, 3-in. pots per doz.....	1.00
Plas elastica, 3-in. pots.....	2.00
Centaurea Gymnocarpa, 2-in. pots.....	3.00
Coleus, assorted.....	3.00
Chrysanthemums.....	5.00
Roses, Marechal Niel, 2½-in. pots.....	1.00
"La France, 2-in. pots.....	1.00
"Niphetos, strong plants, 4-in. pots.....	12.00
"H. P. 2 year, strong dormant plants.....	10.00
"Meteor and Mrs. Jno. Latimer, 2-in. each.....	20
Verbenas, assorted.....	2.00

New Roses and Clematis. Correspondence Solicited.

## SIDNEY TUTTLE & CO.,

BLOOMINGTON (PHENIX) NURSERY,  
BLOOMINGTON, ILL.  
Mention American Florist.

## VERBENAS.

### SALABLE PLANTS.

A fine collection from No. 2 rose pots, at \$2.00 per 100

### CANNA EHEMANNI

From 6-inch pots, at 10 cents each by dozen or 100.

### PANSIES.

Superb strain blooming plants, from \$8.00 to \$12.00 per 1,000.  
Look for Smilax ad. in next issue. I want your trade.

## ALBERT M. HERR,

Lock Box 338. LANCASTER, PA.

## VERBENAS.

Our Verbenas are in fine, healthy condition, and variety of color unsurpassed.

	Per 100, 1,000
Fine Collection, from 3-in. pots, 40 var.....	\$3.00; \$25.00
Coleus, fine collection, from pots.....	4.00; 22.50
Mammoth Set.....	2.50; 22.50
" 2½-in. pots.....	4.00; 22.50
" 2½-in. pots.....	4.00; 22.50
Polegonums, fine collection, 3½-in. pots, 12 var.....	4.00; 22.50
Coleus, fine collection, from pots.....	4.00; 22.50
" rooted cuttings.....	1.25; 10.00
Pansies, transplanted in frame.....	3.00; 25.00
Geraniums, double and single, 4-in. pots.....	8.00; 50.00
Anemopsis Quinquifolia, pot grown.....	8.00; 25.00
Chrysanthemums, fine collection.....	4.00; 25.00

## ROSES

"Bon Silene, 8-in. Am. Pearl, Safrano, Niphetos, Mermets, 2½-inch pots, \$5 per 100; \$45 per 1,000.  
Brides, from 2½-in. pots..... 8.00  
Papa Gontier..... 8.00  
Teas, general collection, 2½-inch pots..... 8.00  
per thousand, \$8.00  
Hybrid Perpetuals, 2½-in. pots..... 6.00  
per thousand, \$6.00  
Wholesale list No. 3 of general bedding plants on application.

I. C. WOOD & BRO., Fishkill, N. Y.

## 100,000

## VERBENAS.

### THE CHOICEST OLD AND NEW VARIETIES.

Fine pot plants..... \$2.50 per 100; \$20.00 per 1,000  
Rooted cuttings..... 2.50; 20.00

— NO RUST OR MILDEW. —

✓✓✓ Packed light, and Satisfaction Guaranteed.

J. L. DILLON, Bloomsburg, Pa.

## VERBENAS A SPECIALTY.

Fine Stock in bloom and bud. Free from all diseases.  
per 100 per 1,000  
From pots..... \$ 2.50; \$20.00  
Coleus from pots..... 2.50; 20.00  
Pansy, in bloom and bud..... 2.00; 15.00

## WM. DESMOND,

Henry Co. KEWANEE, ILL.

# A Grand Winter Flowering Tea Rose.

## ORIGIN UNKNOWN. CALLED BY US "THE GEM."

*A Special Prize was awarded this Rose for being a Rose of special value, and worthy of merit, at the Penn. Hort. Society's spring show, April, '88.*

It is a Rose larger in size than the Perle des Jardins, fragrant, of good habit, a vigorous grower, and a very free bloomer. The color is creamy white, shading richer towards the center; the outer petals are occasionally tinged with pink.

We have tested this Rose thoroughly the past two winters, and have no hesitation in recommending it as a Rose that florists can grow with satisfaction and **PROFIT**.

Good judges who have seen this Rose growing pronounce it First-Class.

### READ WHAT IS SAID ABOUT THIS ROSE BY MEN WHO HAVE SEEN IT:

*Dear Sir:*—After having seen your Rose growing, I would say it is a Rose in size about like Mermet or Bride, and being a strong grower and free bloomer, that it will prove quite an addition as a florist's rose.

Yours truly,

PHILADELPHIA, March 17, 1888.

JOHN WESCOTT, of PENNOCK BROS.

PHILADELPHIA, March 17, 1888.

Yours truly,

CRAIG & BRO.

*Dear Sir:*—Having carefully examined the Rose you have now to offer, I consider it a very fine Rose for winter cut flower work, but consider it as undecided what variety it can be.

SUMMIT, N. J., April 5, 1888.

JOHN N. MAY.

*Dear Sir:*—Having to-day seen your Rose for the first time I should consider it a first class Rose for florists use, being rather larger than a Perle, of good, robust habit, of pale lemon color with a slight pink tinge on the outside petals; resembles Marie Van Houtte, but as seen at your place finer than I have ever seen that variety.

WEST HOBOKEN, N. J., April 5, 1888.

ERNEST ASMUS.

Strong, healthy plants in 2-inch pots, will be ready June 1, 1888, at \$25.00 per 100. Send for full descriptive circular.

**C. RAMSDEN, Agent,**

P. S.—THIS IS THE ROSE WE OFFERED IN APRIL 1st ISSUE UNDER THE NAME OF "THE GEM."

**MORTON, PA.**



## SURPLUS STOCK.

—\* 25,000 \*—

**MUSA ENSETE, THE GREAT ABYSSINIAN BANANA.**

**—100,000 ROSES—**

PERLES, NIPHETOS, BRIDES, C. MERMET, PURITANS, LA FRANCE, AM. BEAUTY, Mad. CUSIN, Etc.

## HARDY PLANTS OF ALL VARIETIES.

Prices extremely low can be had on application.

**B. A. ELLIOTT CO.,**

**PITTSBURG, PA.**



## SPRING SALES OF BEDDING PLANTS AT AUCTION

Every Wednesday and Saturday at 10 a. m. beginning May 2 and ending June 16, 1888.

Any one wishing to consign plants to our sales can send by freight and notify us. We will take proper care of them. **RATES OF COMMISSION** 12½ per cent. for selling and 2 per cent. for advertising. References, any of the florists about Boston.

We shall have from 1,000 to 2,000 **SNOWDON** and **ANNA WEBB** Carnation plants in first-class condition at every sale held during the Spring. Persons attending our sales can feel assured of finding a full line of everything the market affords.

**N. F. MCCARTHY & CO., Auctioneers,**

Address of Auction Room, cor. Congress and Franklin,

63 Bromfield St. BOSTON, MASS.



## Ferns and Asparagus Plumosus.

There are few nurseries where fern growing as a commercial enterprise is carried out to the extent it is by Mr. May of Edmonton. As one wanders through house after house, the quantity of ferns is quite bewildering. *Adiantums*, *pterises*, and *phlebodiums* may be seen in countless thousands and in all stages, from small plants in 2½ inch pots to good-sized specimens in 6-inch and 7-inch pots, all looking vigorous and healthy. *Pteris Mayi*, which is now becoming very popular as a market fern, and deservedly so, may be seen in quantity. Without doubt, it is one of the most distinct forms of *pteris* of recent introduction. The golden polypody (*Phlebodium aureum*) is a handsome-looking fern, distinct and effective, and now very popular in the market. The Maiden-hair fern is always in request, and several large houses at Edmonton are entirely filled with it, every inch of available space being utilized. In addition to the stages being thickly covered with plants, pans are suspended from the rafters, and in these are placed 6 inch pots, each containing a fern. The beautiful specimens of *Adiantum Farleyense*, *A. rhodophyllum*, and *A. Victoria* grown in this manner showed how well this treatment suited them. Nor was this mode restricted to ferns only. In one house was a fine lot of young crotons, strong, dwarf, and brilliantly colored, and here the roof also had to carry its share of suspended plants. Of course, this method would only answer in houses of the modern style, where the rafters are small and a greater amount of light is obtained. In another house was a lot of the climbing fern (*Lycopodium scandens*). Large plants stood in a long row at the edge of a raised bed, a cord was run along the length of the house just beneath the roof, and from this, strings, to which the growths were trained, were carried downwards, three or four being provided for each plant. Treated in this way this fern is found to be very valuable for cutting, as by cutting the string with the fern, sprays can be obtained to any length desired.

*Asparagus plumosus nanus* is also grown very well. In one large house it is planted up to the roof. It had only been planted a short time, but it was sending up numbers of fine, strong shoots, and, with plenty of root-room and head-room, no doubt it will grow to a great size, keep healthy for a long time, and furnish an unlimited quantity of elegant sprays for cutting, for which purpose it is very valuable. In a cut state it will keep fresh for as many days as delicate fern fronds will hours, and it is quite as beautiful.—*A. H.*, in *London Garden*.

A SUBSCRIBER.—In reply to your query there are two systems which are almost equally popular with florists. One is known as the "up hill" and the other as the "down hill" system. In the first named the pipes rise gradually to the point most distant from the boiler and return on nearly the same grade to the boiler; in the second the flow pipe rises to a height of six to eight feet (some times more, depending on the depth of the boiler pit), crooks and drops at once several feet (enough to get the pipes under the benches) and then grades down, all the way round to the boiler. The expansion tank is usually placed at the highest point in both systems. We never before heard of the arrangement you describe. It could readily be changed to the "down hill" system above described.

## TO THE JOBBING TRADE.

I HEREBY INFORM THE TRADE THAT

Mr. H. A. DAACKE, 22 Dey Street, NEW YORK,

Is my sole Agent for the United States and Canada for the sale of my own grown

## DUTCH BULBS,

Of whom Catalogues may be had upon application

B. J. LOMANS,

\* \* \* \* \* Haarlem, Holland.

## ROSES FOR FORCING.

GROWN FROM THOROUGHLY RIPPENED FIELD-GROWN PLANTS  
LA FRANCE, MAD. DE WATTEVILLE, SUNSET,  
PAPA GONTIER, BRIT. BON SILENT, MAGNA  
CHARTA, GEN. JACQUEMINOT, AND OTHER POPULAR VARIETIES  
IN LARGE SUPPLY. SEND YOUR LISTS AND HAVE THEM PRICED.

SPECIAL QUOTATIONS IN LARGE LOTS.

Address

THE DINGEE &amp; CONARD CO.,

ROSE GROWERS, WEST GROVE, PA.

## NOTICE.

Through irregularities in the Chicago post-office, considerable mail addressed to me has been lost. Those of my correspondents who have addressed me by mail and failed to secure a reply within a reasonable time, will please write again and oblige, the said irregularities having been now remedied by the department.

GEO. W. MILLER, Wright's Grove, Chicago.

## CHEAP STOCK, BUT GOOD.

Clematis Viticella, 2 year plants.....	Per 100
Plumula, 2 year plants.....	3 60
Verbenia blooming plants.....	6 00
Anthem. Coronaria Plenis.....	2 00
Named Altheas 3 to 4 feet, nice.....	4 00
Scorn King Fuchsias.....	12 00
Chrysanthemum "Curiosity" \$1.00 per dozen.....	4 00
in variety.....	3 00
Double Sweet Alyssum.....	3 00
Pansies, blooming plants, splendid strain.....	2 00
in nice seed-bed plants.....	4 00

J. B. LEE &amp; SONS, Madison, Lake Co., Ohio.

## MARIA LOUISE VIOLET.

Grown from fall runners, and wintered in cold frame. No old crowns, \$2.00 per hundred; \$15.00 per thousand.

## W. DAVISON,

P. O. Box 505, NYACK, NEW YORK.

## SPECIAL OFFER

## FIRST-CLASS STOCK.

L. AURATUM.....	Per 100
.....	\$8.00
L. RUBRUM.....	9.00
SPIRÆA JAPONICA CLEMENS.....	5.00
ASPARAGUS ROOTS, strong, 2 year.....	Per 100
.....	4.50

## J. C. VAUGHAN,

146-148 W. Washington St., CHICAGO.

## GLADIOLUS

## \* TUBEROSES

ORNAMENTAL NURSERY STOCK.

## SAMUEL C. MOON,

Wholesale Nurseryman and Gladiolus Grower,  
MORRISVILLE, Bucks Co., PA.

## DOUBLE WHITE PETUNIA,

## MRS. G. DAWSON COLEMAN.

Endorsed by such florists as Draper, Henderson and Hilditch, as the finest double white ever produced. Equilibrated in shape, pure white in color. For floral work and bedding it has no equal. Mail, five for 75c; eight for \$1.00.

## NEW COLEUS FOR 1888.

Harry Harold and the Mikado..... }  
Tokio and Yellow Jacket..... } 10 cents each.  
Nonpareil and Purple Prince..... }  
John Gode, the Chicago Beder, doz., 50c; each 10c.  
The set of seven for 60c., two of a kind \$1.00 by mail.

THOS. G. HAROLD,  
KINGSTON, Somerset Co., MARYLAND

## WE HAVE

## FINE PLANTS OF THE FOLLOWING

ROSES.....	Per 100
Malmaison, Sombreuil, The Bride, Mad. Alex., Bernina.....	\$ 5 00
Alfred de Rougemont, La Reine, Annie de Diebuech, Con de Blancs, Henry Martin, Mermel, Safrano, White Bon Silence, Bon Silence, Camerois, La Pictrole, Souv. de Chas. Montault, and fifty other good varieties. First size \$3.00 per hundred, second size.....	4 00
Geraniums, in 21 varieties.....	3 50
Bismarck, Holly Wreath, Le Reueante, Mad. Sallier, White Distinction.....	4 00
Rose Geraniums and Schrubland Pel.....	3 50
Heliotrop, 3 varieties.....	2 50
Fuchsias and Lantanas.....	3 00
Carnations, Sunrise, Le Graw, Almas's White, Pictoria and Hinsdale.....	2 00
Alternantheras and Ageratum.....	3 00
Honeysuckles, Indian, Andre Reutenbach.....	3 50
Chrysanthemums, 50 varieties.....	4 00
Coleus, Golden Beder and Verschnelt.....	3 00
in 100 sort.....	3 00
Begonias, Rubra, R. Alba and Sandersoni.....	3 00
Cobea Scandens.....	4 00
Vincas.....	3 00
Passifloras, Constance Elliott, Smithii, Tripar- ciata and Fordii.....	4 00

Address GEO. THOMPSON & SONS, Louisville, Ky.  
Mention American Florist.

## A VALUABLE LOT OF PLANTS

## FOR SALE.

Suitable for Propagating or for Center Pieces, in  
Vases, etc., and for Bedding, such as the following.  
Croton interruption, 2 to 3 feet high.  
Abutilon Thompsonii, var. plenn.  
Hibiscus, double and single.  
Begonias, etc.; also *Amaryllis Johnsonii*  
and *Eucharis Amazonica*,  
and many other plants for sale at a bargain, for  
want of the room. Send inquiries to

## LEVI A. LOVELAND,

NEWARK, Wayne Co., N. V.

## ROFFEA

(—FOR TYING—)

Correspondence Solicited.

## M. B. FAXON,

—SEEDSMAN—

21 South Market Street, BOSTON, MASS.

SEND FOR SEED CATALOGUE.

## PRIMULA OBCONICA

## IN QUANTITY.

## FINE, HEALTHY PLANTS.

## PETER FISHER,

Montvale, Mass.

## SMILAX FOR EASTER

IN QUANTITY FOR THE TRADE.

STORM KING FUCHSIA Well rooted Cut-  
tings, \$3.00 per 100, as good as pot plants.  
FUCHSIA PHENOMENAL \$6.00 per 100, or  
will exchange for Chrysanthemums and Geraniums  
of some varieties, and dbl. Abut. Thompson.

F. E. FASSETT & BRO.,  
Ashtabula, O.





## Convection of Heat.

The inquiry of F. B. in the issue of March 1, page 340, leads me to give a few ideas which may help him and others who use flues for greenhouse heating. There are two ways by which the heat of a furnace or boiler is communicated to the house; by radiation and convection. The apparatus being usually placed low, the radiated heat from the flue or pipes is absorbed chiefly by the walls of the house, the ground, and under side of the benches.

Convection is the conveyance of heat by the air surrounding the furnace—or the water in the boiler—becoming heated and rising, by becoming expanded and therefore lighter, and colder air or water flowing in to take its place. The power of a furnace, as in the case of F. B., to warm the far end of the house, depends on the facility with which the cold air can pass to the furnace from that end. If the ground is level it will move very slowly. If it descends toward the furnace it will move more rapidly according to the pitch of the descent. In one house which I heated partly by a flue, I dug a deep trench under the walk, slanting toward the furnace. There was always a current of air down, which gave a chance for the warm air to pass along the top of the house to the colder end.

A covering of sand on the furnace, kept constantly wet, is also a help toward equalizing the heat, and moist air is more easily heated than dry. Soapstone makes a good top for a furnace and flues, as the expansion is very small, and it does not crack if it is wet when hot, as fire-brick or tile pipe is apt to do.

If F. B. will provide a wide space around the furnace for large volumes of air to pass quickly over the heated surfaces, and a continuous, unobstructed descent from the far end, to the bottom of the heater, I think he will find an improvement. The editor's suggestion of a "drum" is good so far as it goes, but the fact is, there is very little heat in a flue seventy-five feet from the fire. The place for the chimney is in connection with the furnace, having a direct damper for use in starting the fire. The chimney being warm greatly increases the draft and carries the heated air further along the flue.

Framingham, Mass.

## D. C. SCHOFIELD,

— MANUFACTURER OF —

Improved \* Greenhouse

\* FLOWER POTS \*

NEW BRIGHTON, PA.,

Offers to the Trade the BEST

Quality of Improved Shoulder Pot  
in the market at the

LOWEST PRICES EVER OFFERED.

SEND FOR PRICE LIST.

Orders will receive prompt and careful attention and satisfaction is warranted in every respect.

## HAND TURNED EARTHEN WARE

Price List for 1888.

24-inch.... per 100,	\$ .50	8-inch.... per 100,	\$ .50
24-inch.... "	25	6-inch.... "	6.75
6-inch.... "	88	10-inch.... "	9.00
6-inch.... "	1.38	12-inch.... "	23.50
6-inch.... "	2.30	14-inch.... "	50.00
7-inch.... "	3.75	16-inch.... "	100.00

No charges for package or cartage. Send \$1.00 for sample barrel before purchasing elsewhere. All florists will find it to their advantage to do so, as we make the best and strongest ware in the market. Terms cash. Address all communications to HILLFINGER BROS., Fort Edward, N. Y.

FOR THE TRADE.  
FLORAL WIRE DESIGNS.

JAS. GRIFFITH,

THE PIONEER MANUFACTURER IN THE WEST,

305 Main Street, CINCINNATI, OHIO.

SEND FOR WHOLESALE PRICE LIST.

HAMMOND'S "SLUG SHOT",  
GRAPE DUST, &c.

IN LOTS TO SUIT THE TRADE.

J. C. VAUGHAN, Chicago. PLANT SEED CO., St. Louis. J. M. McCULLOUGH'S SONS, Cincinnati.  
J. A. SIMMERS, Toronto, Ont. J. R. & A. MURDOCH, Pittsburgh. A. W. LIVINGSTON'S SON, Columbus, O.  
And by Eastern Wholesale Seedmen.

## M. M. BAYERSDORFER &amp; CO.

56 N. 4th St., Philadelphia, Pa.,

Manufacturers and Importers of

## BASKETS \* AND \* FLORISTS' \* SUPPLIES.

A large variety of Baskets for

COMMENCEMENTS.

## Ed. JANSEN,

Manufacturer of

## NOVELTIES IN BASKETS

FOR FLORISTS,

124 WEST 19TH ST., NEW YORK.

SPRING STOCK NOW READY.

## Philadelphia Immortelle Design Co.,

904 Filbert St., Philadelphia, Pa.

For DESIGNS, WHEAT SHEAVES,

Immortelle Letters and Baskets,

SEND TRIAL ORDER.



ONLY POTTERY MAKING A SPECIALTY OF

## FLOWER POTS

FOR FLORISTS.

THE WHILLDIN POTTERY CO.,

713 & 715 WHARTON ST.,

PHILADELPHIA.

## \* BARBED \*

## GLAZIER \* POINTS.

FOR SALE IN

BOSTON, MASS. . . . by Wm. J. STEWART,

67 Bromfield Street.

PROVIDENCE, R. I. . . . .

CHICAGO, ILL. . . . . J. C. VAUGHAN,

146 W. Washington Street.

Retail at 50c. per 1,000. 5,000 will be sent by Express free on receipt of \$2.50. PRINCERS, 35c. Each.

## B. B. CHANDLER,

Patentee and Manufacturer,

HYDE PARK, MASS., U. S. A.

Mention American Florist.

ESTABLISHED, 1866.

## Floral Wire Designs,

Manufactured by

N. STEFFENS,

335 East 21st Street, - NEW YORK.

Mention American Florist.



Mention American Florist.

## SYRACUSE POTTERY CO.

Sells Flower Pots by the crate only, and ships all over the U. S. Try a crate. Samples in first crate. PRICES PER CRATE, CASH WITH ORDER:

3 1/2" Thumbs,	\$3.00,	8 3/4" 4-inch,	\$5.00,
2,625 2 1/2-inch,	8.00,	600 4-inch,	4.75,
1,875 2 1/2-inch,	7.25,	300 4 1/2-inch,	3.50,
1,300 special 3 1/2-in,	6.00,	320 5-inch,	4.40,
1,150 3 1/2-inch,	5.50,	100 6-inch,	3.50,

A crate weighs 600 lbs. and goes at buyer's risk and freight. Our list, rate to Cleveland is 10c. Baltimore or Philadelphia, 15c; Detroit, Columbus, Boston or Portland, Me., 10c. Send for list, rates and prices of 17 ready packed crates, and of mixed crates packed to order. We ship same day cash comes. Send P. O. order to

J. N. PERKINS, Manager, Syracuse, N. Y.



Second Edition.

GEO. A. SOLLY & SON'S  
BOOK OF PLANS

For  
Carpet and Ornamental Flower Beds.  
With many it is a difficult task to lay out a carpet bed, or fancy design on the lawn, and perhaps more difficult to choose the proper plants to harmonize, so as to give the best effects. The object of these drawings is to assist gardeners and amateurs, and to enable them to choose the proper plants for their work. It is expected that this book will supply a long felt want, as it is the first and only publication entirely devoted to Fancy Flower Bed Designs. This, our SECOND EDITION, consists of over 100 designs, finely engraved, on good paper, nicely bound, sent pre-paid to any address on receipt of Price, \$3. GEO. A. SOLLY & SON, SPRINGFIELD, MASS.

Mention American Florist.

Delegates to the next convention will travel  
via the Pullman Car Line

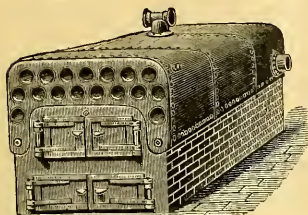
TO AND FROM  
Lansville, Indianapolis, Cincinnati, and the winter resorts of Florida and the South. For full information address  
E. O. McCormick, Gen. Passenger Ag't, Chicago.

ESTABLISHED 1854.

## Devine's Boiler Works

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers.



Capacity from 350 to 10,000 feet of four-inch pipe.  
Send for New List.

PETER DEVINE,

387 S. CANAL ST.,

CHICAGO.

## Ives' Putty Machine.

Patented Jan. 8, 1887.

The best device ever invented for laying putty. With this you can make old leaky sash perfectly tight without removing the glass. It will do the work of two men in bedding glass.

Sent by Express on receipt of price, \$3.00

J. H. IVES, DANBURY, CONN.

## HALES' MOLE TRAP

For destroying ground moles in lawns, parks, gardens and cemeteries. The only PERFECT mole trap in existence. Guaranteed to catch moles where all other traps fail. Sold by seedsmen, Agricultural Implement and Hardware dealers, or sent by express on receipt of \$2.00 by H. W. HALES, RIDGEWOOD, N. J.

## Conservatories

GREENHOUSES, ETC.

Erected in any part of the U. S. or Canada  
Glazed on the

Helliwell Pat. Imperishable System

OR WITH PUTTY.

For further testimonials, illustrated catalogue or estimates address

JOSEPHUS PLENTY.

HORTICULTURAL AND SKYLIGHT WORKS.

Offices, 124 Pearl Street, NEW YORK.

TOT  
DED SASH.  
VENTILATORS.  
WRITE FOR PRICES.  
CASH IN FULL SIZE  
PINE OR CYPRESS.  
WE CARRY  
A FULL STOCK  
OF  
12, 14 and 16 foot lengths.  
JOHN L. DIEZ & CO.,  
530 No. Halsted  
Street,  
CHICAGO.



FOR HEATING

Private Dwellings, Public Buildings,  
Offices, Conservatories, Etc.

— BY —

HOT WATER CIRCULATION.

THE GURNEY HEATER is the best, most economical and durable. Seven sizes. Quickly set up; requires no brick-work; does not corrode or rust out.

Saves, 25 per cent. in Fuel.

Noiseless in Operation.

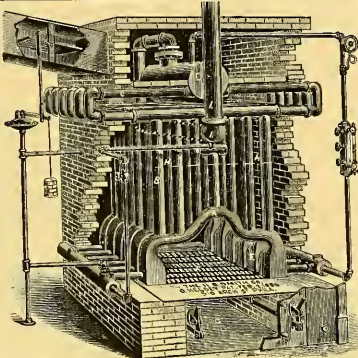
No Danger of Explosion.  
Even Temperature.

Our new INSTRUCTION BOOK will be sent gratis to any address, also to ARCHITECTS and FITTERS upon application. Also price list.

GURNEY HOT WATER HEATER CO. 237 Franklin St., BOSTON.

WORKS AT EAST BOSTON, MASS.

SELLING AGENCIES—M. H. Johnson, 140 Centre St., N. Y.; Rice & Whitacre Mfg. Co., 42 and 44 W. Monroe St., Chicago, Ill.; T. R. Chase, 31 Edmund Place, Detroit, Mich.; William Gardner & Co., Portland, Oregon; J. L. Frisbie, 526 Phila. St., Covington, Ky. It pays to do work early.



ESTABLISHED 1853.

— THE —

O. K. STEAM GENERATOR

Is especially adapted to warming

GREENHOUSES, GRAPERIES  
AND CONSERVATORIES.

Special features insure

Economy, Simplicity, Durability,

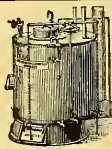
Giving best results with least labor and fuel.

For FURTHER DESCRIPTION.

THE H. B. SMITH CO.,

510 Arch Street, PHILADELPHIA, PA.

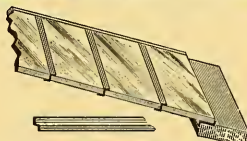
Mention American Florist.

Reduce your Coal Bills  
THE FURMAN STEAM HEATERESPECIALLY ADAPTED FOR  
WARMING GREENHOUSES.

Gives a most uniform heat night and day. Can be run with least attention, and a SAVING of fully 20 to 25 Per Cent. in Fuel over any other method. Burns HARD or SOFT COAL. Endorsed by leading florists. Send for full illustrated Catalogue, Address HERENDEEN MANUFACTURING CO., CENEVA, N. Y.

IMPROVED GLAZING.

J. M. Gasser's Patent Zinc Joints,



For putting glass without laps; makes it air and water tight; saves fuel and glass. No breakage from frost. Also the best improved fuel oil Burners for steam boilers. Send for sample and price list.

J. M. GASSER,

101 Euclid Avenue, CLEVELAND, O.

## SASH BARS

VENTILATORS, RIDGES, GUTTERING  
AND LUMBER.

NO WIDE-AWAKE FLORIST need be told  
it will pay him to use Sash Bars, etc. made from

CLEAR CYPRESS.

Bars all Shapes up to 20 feet long.

Send for circulars and estimates.

LOCKLAND LUMBER CO.,

LOCKLAND, HAMILTON CO., OHIO.

## PIPE AND FITTINGS FURNISHED

— TO —

PLANS AND SPECIFICATIONS.

Contracts solicited for

HEATING GREENHOUSES.

Most improved plans.

ALL WORK GUARANTEED.

Prices furnished on application.

E. A. STIMSON &amp; CO.,

No. 22 and 24 Sears Street,

DAYTON, OHIO.

GOLDMAN'S ATOMIZER  
FOR A THOUSAND AND  
ONE USES.

COMMENT UNNECESSARY

Practical  
and Useful.You will  
not part  
with it.

For Flowers, Window Gardening, House Plants, Destroying Insects, and for various fine sprays. Most natural substitute for fog or dew. By dipping in water while closed, fills instantly. Bail finely perforated; spray controlled by pressure of hand. Size of lemon squeezer. Weight, 5 oz. Exclusive Territory to Agents. Sells on its own merits; no talk. Sample by mail, 50 cts. This is the Atomizer that sold so well at the Danbury, Albany and other Fairs. Florists and Seedsmen, show it to your customers; sells fast; good profit. Excellent for indoor plants. Send for illustrated pamphlet and price to the trade. Mention this paper.

M. GOLDMUN, Manufacturer, Pittsfield, Mass.



## Index to Advertisers.

Advertising Rates, etc.	455
Allen, W. S.	455
Bailey, F. A.	455
Bayersdorfer, M. M. & Co.	464
Beard, E.	453
Berger, H. H. & Co.	463
Blanc, A.	463
Boymon, Jas. L.	453
Brackenridge & Co.	463
Brauer, L. B.	455
Bro. Ind'l. Gardens	454
Brown, Robt. S. & Son	460
Barrows, J. G.	457
Chandler, B. B.	464
Clark Bros.	456
Coles, W. W.	463
Connelly, Jno. J.	463
Cook, J.	455
Currie Bros.	457
Curwen, John Jr.	457
Diercke, H. A.	462
Davison, W.	462
Desmond, Wm.	470
De Veer, J. A.	463
Devine, Peter G.	463
Diez, John L. & Co.	465
Dillon, J. L.	465, 460
Dingee & Conrad Co.	465, 462
Drer, H. A.	456
Dunkley, Joseph	461
Elliot, B. A. & Co.	461
Fassett, F. E. & Bro.	462
Faxon, M. B.	463
Fink & Co.	463
Fisher, Peter	463
Gasser, J. M.	463
Giddings, A.	460
Gouldman, M.	460
Gray, Benj.	463
Griffith, Jas.	464
Griffith, N. S.	464
Gulick, Henry	464
Gorney Heater Co.	465
Hales, H. W.	465
Hallock, V. H. & Son	459
Hammond, Benj.	464
Hammond & Hunter	464
Harold, Thos. G.	462
Heinz, Chas.	458
Hendrick, James	453
Herenedee Mfg. Co.	453
Herr, Albert M.	460
Hieley, Henry G.	464
Hillinger Bros.	464
Hitchings & Co.	466
Hoffman, J. M.	463
Hooker, H. M.	466
Hulsebosch Bros.	458
Hurr, Freeman	458
Ives, J. H.	458
Jansen, Ed.	464
Joosten, C. H.	456, 463
Kallitz, J.	459
Kennett Bros.	455

King, James	458
Krieg, W. C.	457
La Roche & Stahl	455
Lee, D. & Son	462
Lockwood Lumber Co.	463
Loveland, Levi A.	462
McArthur, F. E. & Co.	459
McFarland, J. Horace	461
McFarish, G. A.	457
Maish, M.	458
Mathews, Wm.	463
May, J. N.	463
Merrick, A. T.	463
Michel Plant & Seed Co.	459
Miller, Geo. W.	462, 463
Monon Route	464
Moon, Samuel C.	462
Moss, Polman	463
Morse, Edw.	463
Myers & Co.	466
Penman, Jas. A.	464
Pennoch, Chas. E.	464
Perkins, J. N.	464
Phila. Ind. Design Co.	464
Plenty, Josephus	462
Quaker City Mch. Wks.	465
Ramsden, G. C.	464
Reed & Keller	464
Roemer, Frederick	457
Rolker, A. & Sons	460
Rupp, H. S. & Sons	463
Schaezel & Potler	458
Schroeder, R.	462
Schofield, D. C.	464
Schultz, Jacob	463
Sodley, John A.	463
Segers Bros.	459
Sears & Co.	463
Siebrecht & Wadley	463
Simmons, W. P. & Co.	461
Simmons, Wm. C.	465
Smith, H. B. Co.	465
Solly, Geo. A. & Sons	464
Spencer, Wm. H.	464
Steffens, N.	464
Stewart, Wm. J.	455
Stinson, E. A. & Co.	463
Strauss, C. & Co.	453
Studer, N.	460
Taplin, James	463
Thompson, G. & Sons	462
Thomson, I. S. R.	463
Udell, Sidney & Co.	460
Van der Schout & Son	458
Van Zanten, H. V. & P.	463
Vaughan, J. C.	456, 458, 462
Ware, Thos. S.	465
Weathered, Thos. W.	466
Welch Bros.	459
Whitlin Pottery Co.	464
Wilks, Mfg. Co.	460
Wood, I. C. & Bro.	460
Young, Thos. Jr. & Co.	455

## Feeding Steam Boilers.

Having lately read of a heavy loss sustained by a Cincinnati florist through a defective pump, I would remark that I consider our system of feeding superior to the pump. It is simply to use another boiler—a much smaller one will answer—placed near and above the level of the heating boiler; to this is attached a supply pipe from city water, or in our case from wind mill tank, another from lowest point of feed boiler to heating boiler, and a third to convey steam to the feed boiler or tank. To feed, all that is needful is to fill up, then shut off supply and open the other two, this gives an equal pressure on both, and the water flows into the boiler by gravity. No matter what the pressure may be, a vent is required in the feed boiler near the top, which must be closed as soon as the water reaches to its level. W.



## GREENHOUSE HEATING AND VENTILATING.

Superior Hot Water Boilers.

JOHN A. SCOLLAY,

74 &amp; 76 Myrtle Ave., Brooklyn, N. Y.

Send for Catalogue.

## GREENHOUSE HEATING.

BY A. B. FOWLER.

Explains fully all the best systems of heating greenhouses by both hot water and low-pressure steam. Tells you the points to consider in selecting an apparatus. How to adjust same to various locations; gives the results of the most scientific experiments. Shows how to compute the exact amount of fuel required for a given space; draft and other important matters.

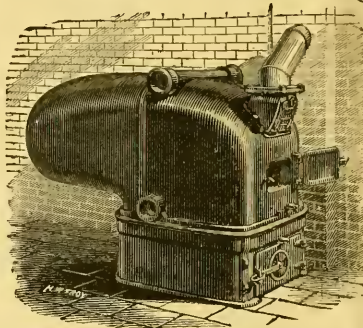
It is highly commended by Mr. John Thorpe and others. Postpaid, 75c.

Sent on receipt of price. Address,  
**AMERICAN FLORIST,**  
CHICAGO.



Sectional View.

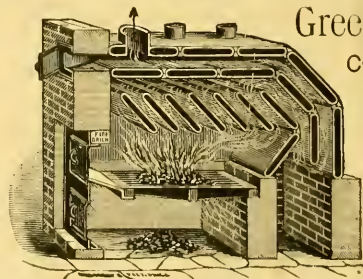
## Greenhouse Heating AND Ventilating



Send 4 cents postage for Illustrated Catalogue.

## Improved Hot Water Boilers

For Heating



Greenhouses, Graperies, CONSERVATORIES, ETC.

ALSO

Cast Iron Pipe, Fittings, Valves and all Material for Heating by Hot Water.

Send for Catalogue.

MYERS &amp; CO.

1173 So. 9th St.,

PHILADELPHIA.

## THE CELEBRATED WILKS WATER HEATER!

For Heating

GREENHOUSES,

DWELLINGS,

POULTRY HOUSES,

STORES, BATH TUBS,

ETC., ETC.

Send for Price List.



S. Wilks Mfg. Co.,

Cor. Monroe &amp; Clinton Sts., Chicago



ALL SIZES OF SINGLE AND DOUBLE THICK

GLASS FOR GREENHOUSES.

ALL GLAZIERS' SUPPLIES.

Write for Latest Prices.  
Mention American Florist.

# THE AMERICAN FLORIST



*America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."*

Vol. III.

CHICAGO AND NEW YORK, JUNE 1, 1888.

No. 68.

## THE AMERICAN FLORIST

Copyright, 1887, by American Florist Company  
Entered as Second-class Mail matter.  
Published on the 1st and 15th of each month by  
**THE AMERICAN FLORIST COMPANY.**  
GENERAL OFFICES, 54 La Salle Street, Chicago.  
EASTERN OFFICE,  
Room 81, Vanderbilt Building, New York.

All communications should be addressed to the  
general office at Chicago.

SOCIETY OF AMERICAN FLORISTS.—E. C. Hill,  
Richmond, Ind., president; John N. May, Sum-  
mit, N. J., vice-president; M. A. Hunt, Terre  
Haute, Ind., treasurer; Wm. J. Stewart, 67 Brom-  
field street, Boston, Mass., secretary. The fourth  
annual meeting at New York, August 21, 22, 23,  
1888.

DECORATION DAY.—We would like  
reports from all sections as to the extent  
of the Decoration Day trade in flowers  
for next issue. Please send a short re-  
port as to the volume of this trade in  
your city, compared with that of last  
year.

THE SIXTH ANNUAL CONVENTION OF  
the Seed Trade Association will be held  
in Chicago, beginning Tuesday June 12.  
A rate of one and one-third fare has  
been secured from the railroads. The  
Sherman House has been selected as  
headquarters.

THE DATE at which your subscription  
expires is noted on the printed address  
label on every number you receive. See  
that the date does not pass without a re-  
newal. When your renewal is received  
the date is changed accordingly. The  
change of date is a receipt for the re-  
newal.

THE AMERICAN ASSOCIATION OF NUR-  
SERYMEN will hold its thirteenth annual  
meeting at Detroit, Mich., beginning  
Wednesday June 20, at 10:30 A. M., and  
continuing three days. Hotel head-  
quarters will be at the Michigan Exchange  
where a special rate of \$2 a day has been  
secured. An interesting and varied pro-  
gramme is being prepared, and the usual  
question box will be provided. Further  
particulars may be procured from D. Wil-  
mot Scott, secretary, Galena, Ill.

ARE YOU arranging your business plans  
for the summer so that you may safely  
leave home to attend the annual meet-  
ing of the Society of American Florists?  
Those who have attended previous meet-  
ings of the national society need no argu-  
ment as to the benefit and pleasure re-  
ceived by being present. Those who  
have not yet attended will never know  
what a good thing they have missed until  
they do attend a meeting. Make up  
your mind now to go to New York in  
August.

### New York Notes and Comments.

August's entertainments in connection  
with the convention, was the subject dis-  
cussed at the last meeting of the Florists'  
club. It would hardly be fair to give an  
outline of the plans concerning the meet-  
ing so far in advance, but it is needless  
to say that if our guests don't have a  
good time it will not be the fault of the  
New York club. Every effort is being  
made to perfect all arrangements in ad-  
vance, so that a certain amount of pleas-  
ure will not interfere with the solid busi-  
ness of the convention. A good deal of  
private hospitality will add to the pleas-  
ure of the delegates, as well as the col-  
lective welcome of the society. At the  
next meeting of the club James Taplin  
will read a paper on "Orchids for the  
Cut Flower Trade," to be followed by  
the usual discussion.

A great deal of bedding stuff has been  
sold at the spring auctions, but much of  
it at excessively low prices. Pansies at  
two cents and verbenas at a cent and  
a half are certainly not extravagant lux-  
uries. But verbenas seem a little out of  
style; a great many do not care for them,  
in spite of the beauty of the newer  
strains. Pegged out so that they branch  
into a regular mat, they are certainly  
fine for a sunny bed. Many of these  
cheap verbenas at the sales were bought  
by people who wanted a temporary fill-  
ing for beds, before putting out tender  
stuff.

Rose Hill Nurseries are to be illu-  
minated by the electric light all through  
the place. The new show house should  
be a fine sight for an evening display.

Mr. C. L. Allen shortly leaves for Eng-  
land, but he intends to return by the be-  
ginning of August.

A lot of palms grown in the West In-  
dian plantations have recently arrived  
here. They are considered in much bet-  
ter condition than those previously sent  
in. Some of the timid growers are won-  
dering whether it will pay them to keep  
on growing palms and foliage stuff, when  
it can be sent in so cheaply from the  
tropics. They say that the market will  
be flooded, and that it will end in the  
big fish devouring all the little ones.  
But it is not worth while to give up  
growing such stuff here just yet. The  
market for decorative plants is not as  
near being overstocked as the flower  
market, and prudent growers are not  
likely to burn their fingers at it for some  
time to come. A big stock of poorly  
grown plants would be more likely to  
hurt the market than an extra lot of  
good ones. Latanias, searothias and  
pandanus are three stock varieties al-  
ways salable in certain handy sizes.  
The West Indian plantation is a bright  
scheme, and likely to be a successful  
one, but growers in this country need

not think their occupation is over in  
consequence.

The dainty English primrose, of which  
"W. H. S. T." writes in the last issue  
with such warm appreciation, is grown  
to a certain extent by our florists here,  
though it is not so often seen as other  
varieties of less actual beauty. Some of  
the suburban florists in manufacturing  
towns, where there is a large English  
population, make a point of having pot  
primroses early in the season, and they  
sell very well. I doubt whether it  
would winter outside in this latitude, on  
account of the abrupt changes of tem-  
perature, but it grows in a cool house  
just as early as the Chinese varieties.  
We have had plants over from England,  
as there is often some difficulty in get-  
ting it true from seed here; one is apt to  
get the old-fashioned vari-colored cow-  
slips instead of the real primrose. A  
few cowslips, as well as primroses, have  
been sold in New York this spring. At  
one of the big private flower shows a few  
years ago there was a bank of real Eng-  
lish primroses, which were very well ad-  
vertised. A charmingly arranged flor-  
ist's window seen recently had a regular  
bank of closely massed English prim-  
roses, backed by Liliun longiflorum.

A good deal of the outdoor stuff seems  
likely to be very late this year; when it  
does come in it makes prices drop to the  
bottom at once. Coarse outside flowers  
make such showy decorations at small  
cost, and last year they were used more  
than ever. Old-fashioned peonies,  
which have been vegetating in seclusion  
for some years, come forward even for  
table decoration, where as a rule the finer  
flowers are used. In some cases kalmia  
or mountain laurel was used with good  
effect.

Roses do not bring very encouraging  
prices just now, when the street stands  
sell good Jacques and Perles for 35 cents a  
dozen. Bon Silene at \$1 a 100 is not  
bad for the time of year, but apart from  
the bedding trade many city florists have  
little to do except count the bricks in the  
buildings across the street.

A rarely-seen aquatic plant is Ponde-  
ria crassipes, which is likely to attract  
notice from anyone fond of plant oddi-  
ties. The thick, fleshy leaves are very  
oddly shaped, giving some suggestion of  
a sarcenaria. It floats on the surface,  
forming roots in the water, without tak-  
ing any hold in the soil. It is a native  
of Guiana, and though known to culti-  
vators for some fifty years it is still com-  
paratively scarce. It has a pretty blue  
flower, but the odd leaves and habit are  
the chief attraction. It grows well in a  
tub, like most of its family. Of course  
few growers will find much money in  
aquatics, but a few pontederias, or the  
pretty fragrant apogoneta will interest  
people without taking up much room.

EMILY LOUISE TAPLIN.



## Long Island Plant Notes.

BY WM. FALCONER.

MAGNOLIA STELLATA; time of blooming, p. 449. Instead of "May 20" please read April 20.

LILIU HANSONI is one of the earliest to start into growth, and it multiplies itself a good deal.

NARCISUS ORNATUS and the ordinary *N. poeticus* are well worth growing by anybody as outdoor plants. Most narcissus fail, after a year or two, in cultivation, but these grow in vigor, multiply in quantity, and bloom full every year with only ordinary garden care.

DON'T WAIT till your larkspurs, hollyhocks, African marigolds and other tall-growing plants are broken down by wind and rain before you stake them. Do it now.

PLUMBAGO CAPENSIS planted out in a warm sunny place makes one of the prettiest and fullest of summer-blooming plants, and its blue flowers are very distinct from anything else we have in the garden.

VINCAS, French marigolds, single petunias and gaillardias for warm dryish sunny places; at the same time in good and fairly moist ground they attain their fullest perfection.

TRY GLOXINIAS planted out in frames as you would lettuce this summer. Remember to keep the frames well shaded from sunshine. Seedlings raised this spring will bloom before the summer is over; besides, see the advantage gained in the large size of the bulbs that were planted out compared with those of box or pot growth.

PARROT TULIPS with stout leafy stems are much esteemed by the ladies for indoor decoration.

ALYSSUM SAXATILE is now—the middle of May—large mats of the brightest golden yellow. It is best grown as a biennial. Sow now for blooming plants next spring.

THE CRESTED IRIS (*I. cristata*) comes into bloom about the middle of May and is a gem in its way. It is of very dwarf spreading habit and well fitted for margin clumps in mixed borders or edgings, or used in rockwork. Its flowers are blue, pretty and more refined in appearance than are those of the majority of hardy irises.

ALLIUM NEAPOLITANUM planted out last fall is now beginning to bloom. Although it has lived over winter it does not show the same luxuriant nature that those treated as pot plants (and from the same batch of bulbs) did.

GLADIOLUS COLVILLI treated as hardy bulbs, except that they are planted in a warm nook, are also growing, but in such a weakly condition as to clearly demonstrate that treating them as hardy plants is abusing them.

RUE ANEMONES (*Thalictrum anemoneoides*) are in blooming great abundance in our woods in May. These if lifted, even when in full bloom, from the woods, brought home and planted in the garden, grow splendidly and live and strengthen year after year. Indeed, our garden plants in open sunny places are finer than are the wild plants in their natural thinly shaded quarters in the woods.

SPRAVS of the crimson-leaved Japan maples can be used with good effect among cut flowers, and just now when they are in vigorous growth and many branches are closely overlapping and in-

juring others, a little judicious thinning will do the maples good.

TRILLIUM ERECTUM ALBUM and *T. grandiflorum*, although native wood plants are among the best and most useful of spring flowers, and they have the advantage of being easily grown in any ordinary garden.

WHAT HAS KILLED the bumble bees? Look at your wistarias and see how the flowers have been punctured and disfigured by bumble bees, then work under the vines and observe what a lot of these bees are dead upon the ground.

PHLOX STELLARIA makes a lovely mat of lavender blue in May. It is a dense and bushy grower, and rather uncommon in cultivation. Nice stocky plants may be raised from cuttings.

"PRIMROSE DAY IN ENGLAND."—"We think it would be a profitable speculation for some enterprising florist to import a number of roots and grow and sell the primrose in America" p. 443. Don't do anything of the sort. But buy an ounce of fresh seed, sow at once and grow from it ten thousand plants for blooming next spring. Imported plants or old plants of any kind would not be as good as these seedlings. Then compare the expenses.

THE SIBERIAN COLUMBINE (*Aquilegia Siberica*) is the earliest of all our columbines and at the same time one of the finest and most distinct, of free stocky habit, fifteen to twenty inches high, very profuse and showy. The flowers are large violet-blue and yellow, and they appear about the first of May and last till the 20th or 25th. Easily gotten up from seed.

DO YOU GROW Canterbury Bells? If not, don't you think they would come in real handy about Decoration Day? You can have them at that time by growing them in a warmly placed cold frame. They bloom out-of-doors in June—usually during the second or third weeks, and make a capital display. As they are biennial sow in June or July for next spring's crop of flowers.

WALLFLOWERS.—I have a nice lot in bloom now. They were planted out in cold frames last October and are there still. But I don't get any good of the flowers, the turnip flea beetle destroys the blossoms and buds, and to a considerable extent the upper leaves as well. Forced in the greenhouses before April I get good enough wall flowers for the flea-beetle hasn't then made its appearance.

THE ALPINE WALLFLOWER (*Cheiranthus alpinus*) is a beauty in its way. It is of dwarf bushy habit and has yellow fragrant flowers which appear in May and June. It is a biennial. I raise it from seed sown in spring and plant out the seedlings in a cold frame where they are wintered; about the first of April I plant them out in the garden where they bloom beautifully. The flea-beetles don't hurt it much. As it is a shy seedling plant, it is somewhat scarce and seeds expensive.

VARIEGATED FUNKIAS.—These are as ornamental as fancy caladiums. Try a bed. Use *F. ovata* in the middle, *F. lancifolia* next and border with *F. undulata*, of course the variegated forms only, and plant in rich, well drained soil and where shaded from sunshine.

EARLY BLOOMING POPPIES.—The Iceland (*Papaver nudicaule*) and alpine (*P. alpinum*) poppies are now in full bloom with us. Oriental poppies won't be in bloom for some time yet, nor will any of the annuals sown last fall. The Alpine

poppy is white, and the Iceland poppiea white, yellow and orange, and many yellow-flowered seedlings have flowers striped and streaked with orange, clearly showing the result of mixed parentage.

MOSS PINK (*Phlox subulata*).—This is in its best estate about the middle of May. Where it has grown into very thick mats the blossoms are so numerous as to completely hide away the foliage. Should cold wet weather prevail as is the case this May, the flowers are apt to rot and destroy the foliage. To avoid this, as soon as the flowers begin to decay I take a wool shears and shear off the blossom covering and let the young growth get a chance to perfect itself.

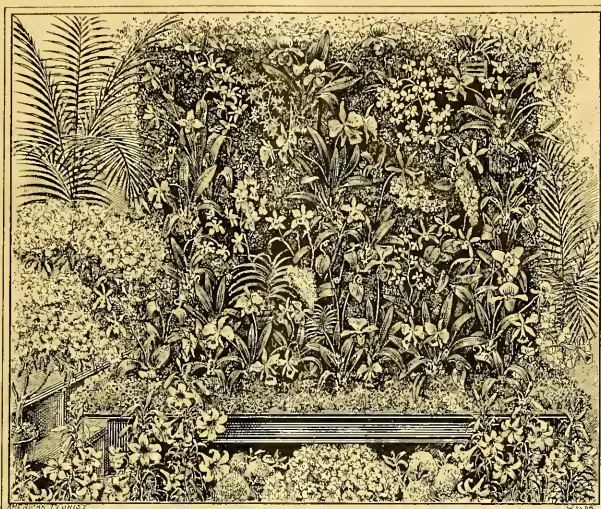
THE SIBERIAN DAISY (*Chrysanthemum Tschihatiewii*) is the prettiest bordering plant we have at present. The narrow deep green mossy line all dotted over with large white daisies. After blooming it spreads immensely. I lift, divide and replant it every year in April. This doesn't prevent its flowering in the least, and in summer keep it in line and bounds by an edging spade. Easily raised from seed. Grows well in the shade.

RHODODENDRONS AND PINES IN ENGLAND, p. 450.—True in England many magnificent varieties of rhododendrons flourish in the open air that here require shed protection in winter, for they have Indian blood in their veins. But no matter, not in Europe anywhere is there a rhododendron garden to compare with the vastness and magnificence of the rhododendron display along the slopes of our Southern Alleghenies. The *Pinus sylvestris* or Scotch pine spoken of is a very common tree in cultivation here and of considerable economic and ornamental importance when young as a shelter or nurse for other trees, but after it is twenty years old decrepitude begins to seize it. But as a shelter it isn't as good as an Austrian pine, and as an ornamental tree, it is very much inferior to our own white or red pines.

## What Does It Cost to Grow Them.

The geranium is one of our standard market and bedding plants, and it is to be presumed that the cost of producing a good plant in a 4 inch pot should not vary to a very great extent in cities with nearly equal advantages as regards climate, cost of coal, etc., yet the most remarkable variation in the selling price does exist. In some cities well grown geraniums in 4-inch pots are retailed at \$1 a dozen. The growers complain that there is no money in them at that price and we can readily believe that there is not unless grown and readily sold in immense quantities. In other places \$1.50 a dozen is the ruling retail price. In Chicago \$2 a dozen is considered bottom rate and the growers here grow as much as those in the cities where a \$1 rate rules. In some other places as high as \$2.50 to \$3 a dozen is the regular retail price, though the places where these rates are obtained are few in number compared to those where the lower rates rule.

If the grower who sells at \$2 a dozen makes little or nothing, the natural inference is that he who sells at \$1 must be losing money very rapidly. Again if the grower who sells at \$1 makes a profit the one who receives \$2 must be doing extraordinarily well. While the expense of growing will of course vary with different growers, owing to little advantages in conditions, capital, management, etc.,



ARRANGEMENT OF ORCHIDS AND OTHER PLANTS

this great difference can not be wholly accounted for thereby. The whole difficulty lies in the fact that we do not know *the exact cost* of producing the plants we grow. We are working in the dark. Who can tell us the actual cost of growing and marketing geraniums—good plants, in 4-inch pots?

#### An Arrangement of Orchids and Other Plants.

The charming group illustrated was arranged by Siebrecht & Wadley, New York, in their store as an Easter attraction. A screen of foliage was placed in the rear of the store with table beneath. On the screen were hung cattleyas, oncidiums, cymbidiums, cypripediums and lycastes. The table was banked with choice ferns and asparagus and on this was a charming show of cut orchids. Below the table stood azaleas, hydrangeas and a pyramid of bloom with palms at the sides to finish the effect.

#### It Don't Pay.

It don't pay to neglect anything.  
It don't pay to keep anything that you can not give the best treatment.  
It don't pay to run greenhouses without having an abundant supply of good water convenient.

It don't pay to employ incompetent help at any price.

It don't pay to grow poor flowers or poor plants.

In don't pay to work without proper tools.

#### Successful Culture.

The conditions necessary to secure the best success occupy much the same relation to each other as the numbers on the combination of a safe lock. One number

of the combination will not unlock the safe—even all but one of the necessary number will not accomplish it, further, all the numbers of the combination are valueless unless placed in proper relation to each other. It is the same in cultivation; each plant has its own particular combination, some simple and others having an elaborate arrangement of conditions to be met. But how many growers there are who are endeavoring to open the inner strong box of nature, which contains her rarest gems, by using but a portion of the requisite combination, or who have the full quota of numbers, but fail in the effort to place them in proper relation to each other. Truly the successful grower must keep his brains as busy as his hands.

#### How Does Your Place Look?

Are your plants all in good salable condition? Do they present the best appearance possible? Have you sorted out all the "lame ducks," and placed them where they will not injure the looks of the house? Why not have a cheap table now, and place on it all those plants which can not be called first class? If all your plants are in such condition that they all properly belong on the "cheap table" wouldn't it be well to devote your whole attention to growing a smaller number of plants and do them better? We most decidedly believe it would. Are your stock geraniums covered with decayed or decaying blooms? "Haven't the time now to keep them picked off," you say. Well! if you haven't got time to keep dead flowers and leaves out of the houses; if you haven't got time to prevent the accumulation of rubbish and dirt in the walks; if you haven't time to do anything right and "can't afford to employ more help," better quietly get out of this business as

quick as possible, and take to some occupation which requires no effort and less brains. You can then possibly spend even more time in "cussin'" that present competitor of yours "who doesn't know anything about the business, but people are such fools they will go there." [A look at the competitor's establishment reveals a place where possibly there are fewer novelties, but everything is much better grown, and is kept clean and attractive. The proprietor may not know quite as much about the "origin of black spot," but he knows that he can sell more plants at better prices by having what he does grow in best condition and keeping his place as clean, attractive and business-like as his best efforts will allow.]

#### The Violet.

Articles on violet culture are numerous of late, still nearly everybody who has written about them seems to be troubled more or less with the so-called violet disease, and as we have not had any sign of it and grow good flowers every year, perhaps it may lead somebody to better success if I should give our way of growing them.

To commence with we put in cuttings November or December from good plants reserved and cut up for the purpose, in any greenhouse bench without any bottom heat, and leave them there until March, when they will be potted off separately into 2½-inch pots and placed in a slight bottom heat in a frame, to assist them in making a good start and fill the pots with roots. As soon as the weather permits they are planted in the open ground, where they get no more care than occasional hoeing and keeping clean until about September 1, when the thin, wiry, weak runners are pulled off and the plant is left with four to eight good crowns, according to strength. I prefer to plant in winter quarters as soon in fall as possible, to give the plants a chance to take hold of the soil before putting on glass. The biggest part of my stock is planted in a solid bed in a pit attached to the long side of a greenhouse, and heated only by openings in the wall ten inches wide, running nearly the whole length of the house. By letting down a board on hinges the openings may be closed or opened. We give air as long as we can in autumn and whenever we get a mild day in winter, but here in Rochester we do not get many such days in that time of the year and the violets have to do without airing sometimes for two months. There is no difference in the plants on benches in six inches of soil in a cool house and those in 6-inch pots in a similar situation, save that the last mentioned are the earliest to bloom.

I have never seen a single plant on my place affected with the disease and am convinced that the reason thereof is our habit of propagating from a lot of unforced plants. We also have a number of plants in cold frames, which we generally have in bloom about the end of March and continue to flower until the old double English violet in the open air comes in. Some years when I happen to be rather short of young plants I divide the plants from these cold frames into single crowns, with a few roots to each, and plant in rows eight to ten inches apart; they generally make as good plants as the cuttings but require a good watering after planting, and if dry weather should set in with no time to



spare at the busy season to see to watering or shading, part of them may die.

As to soil, the violet will do well in any good garden soil. We have had them in heavy clay and loam, to a very light sandy soil, in dry and wet situations, and invariably they were healthy. So I would advise every florist to cut up his best plants for propagation in November or December, plant out as soon as the weather is suitable, and I am sure violet disease will be a thing of the past in one, two or three years. JOHN B. KELLER.

Rochester, N. Y.



Her Majesty.

At last "Her Majesty" has deigned to show herself to us in this part of the world; several plants having bloomed this spring for the first time. As seen here, the buds are both in color and size exactly like the colored plate sent out by Blanc in 1885, while the open flower is not nearly so large and hardly as double—in fact the flower is not as fine as the buds would lead one to expect.

The plants were grafted plants in 4 inch pots planted outside two years ago. None of them had so much as a bud last spring but made a strong growth considering the cultivation, which was not thorough. As to its value for open air culture here we think it quite desirable in all large collections on account of its large size, beautiful color and fineness of finish; it being free from the coarseness usual to extra large roses. It is as far as we could perceive absolutely odorless.

Though inferior to Paul Neyron for general usefulness it is to an enthusiast a much finer flower.

CHAS. N. WOODRUFF.

Macon, Ga., May 11.

#### The Puritan, M. Robert and Luizet.

I have had a limited number of Puritans on trial this winter, and have no reason whatever to complain of the flowers produced, especially when it is considered how the stock of that rose must have been forced the four years past, to satisfy the call for plants.

Marechal Robert is an excellent rose for forcing, of beautiful color and shape. I understand it cannot be sold in market, probably on account of its drooping habit, but it is certainly admirable for private use.

Among hybrids, there are any rose to beat Mad. Gabrielle Luizet for beauty, fragrance, keeping qualities, earliness and productiveness.

J. W. MERTZ.

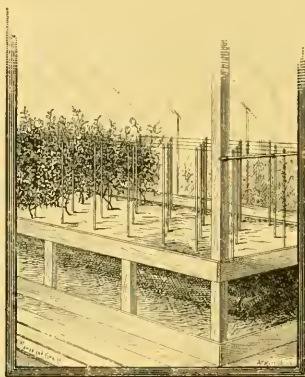
#### The Puritan Again.

I do not think much of the Puritan. Even A. C. Brown would not now hear that exclamation, "Such lovely white roses and such beautiful foliage," for the plants are now covered with mildew, and the flowers are anything but lovely, though Beauties, Souvs, Perles and Brides in the same house show no signs of fungus and are as thrifty and as full of bloom

as one could ask. The Puritan may be a good rose, but anything that is so difficult to grow to perfection certainly does not pay, especially when Niphotos, Bride and Cook can be so readily bloomed. C.

#### Staking Roses.

We give an illustration of a method of staking in use by many large eastern rose growers, which possesses a number of advantages over the usual way, in that much lighter stakes can be used while securing a still stronger support. The light hardwood stakes are secured by wires tied to the tops of the stakes as shown in illustration. The wire generally used is No. 14, galvanized iron. At intervals of ten or fifteen feet cross pieces of hardwood strips, the same size as the stakes, are placed across the wires next to a row of stakes and tied at each wire; this strengthens the whole so that it is very durable.



STAKING ROSES.

#### Florists Growing Celery.

I have no doubt that quite a number of florists in the country are growing this palatable vegetable, and it is certainly a proper plant for them to grow, because it is used as much for table decoration as flowers and a glass of nice celery makes as much display as a bouquet, being not quite as aesthetic but more essential. Some florists have more ground connected with their business than they can make use of properly and if they would utilize it for growing celery the advantages would be a profitable crop and well cultivated grounds, which would be fit for any plants in a few years time.

We started in the florist's business on a piece of ground of about ten acres and used about three acres for our business, the rest being vineyard and land that had been used for growing vegetables, but was so exhausted that weeds hardly grew thereon. Not caring to grow vegetables I planted the greater part of it in strawberries, after it was well worked and manured, but in a few years I plowed the small fruit under, as it was not profitable and required a great deal of work, at such a time when we were busy with our greenhouse work. I was a little doubtful about growing celery on such poor land, but after being well enriched

and cultivated, I planted out the first lot in June, and the last in the latter part of August; the season being beneficial to its growth, the result was a very fair crop which so encouraged me that I have been growing it ever since as regular as geraniums.

The seeds are sown in well pulverized rich soil in a frame or in the open ground as soon as possible in the spring. I generally sow in frames, as the seedlings require some attention, and are easier watered and shaded when necessary than in the open ground, also the weeds can be kept down better, which is very important if you desire strong plants. We plant the first lot about the latter part of June and keep on planting, whenever the soil is in condition, until September. After planting keep the crop clear of weeds and the soil around the plants loosened up, so that the rains have some effect, as celery does not thrive without a good deal of water. Towards the latter part of September it should be banked up, but not too much at a time, as it requires another hanking before cold weather sets in. As soon as severe frosts set in it is time to store it, either in trenches or in a cool airy cellar.

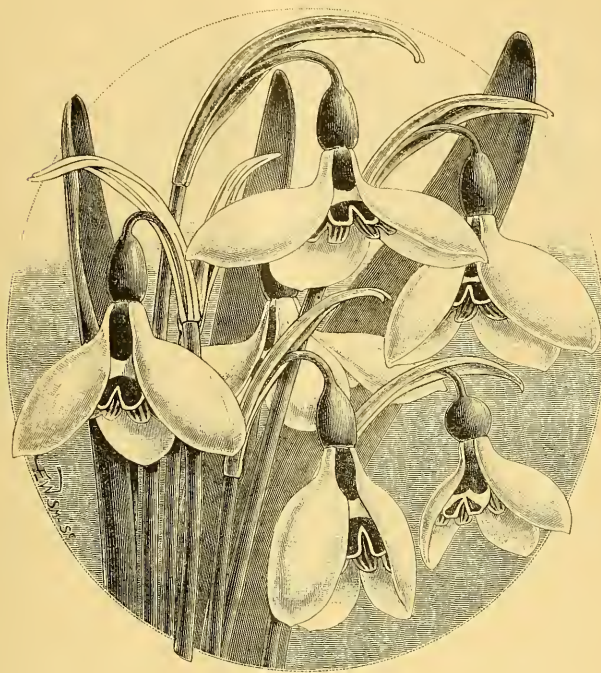
We grow from forty to sixty thousand plants each season and all the work is done by our regular hands. Last year we received sixty cents per dozen bunches (one strong or two smaller plants constitute a bunch) which was a good wholesale price, and we had no trouble to dispose of any quantity desired. The varieties we grow principally are self-blanching sorts, White Plume requiring less labor than other sorts, being more salable and keeps well. Boston Market and Golden Dwarf are two very good varieties and Henderson's Rose celery, although not as easy sold as the white sorts, is more crisp, has a stronger flavor and is much harder than the white.

Pittsburg, Pa. E. C. REINEMAN.

[Possibly it may be well for florists in small places to add something to their income in the manner described, but for those near a good city market we believe in selecting a few things and devoting entire attention to doing them extra well rather than to add any outside issue to still further divide the attention of the grower. However those located in towns where there is hardly enough trade to make the growing of greenhouse plants alone profitable, might receive a valuable hint from above article.—Ed.]

#### The Black Chrysanthemum Aphis.

This aphid is readily distinguished from other species by its black color and by its habit of alternately raising and lowering the rear portion of its body, apparently for the purpose of bringing its sucking apparatus in closer contact with the leaf. Having satisfied myself that this insect can be exterminated I propose to give my plan, and in the first place it may as well be premised that florists almost invariably apply all their efforts to keeping down such pests and rarely if ever attempt to stamp them out. Two things are particularly necessary when we have the latter end in view. First, it will not do to "put our hands to the plough and look back" but having decided what to do it must be followed up thoroughly and constantly until completed; second, great care must be used not to allow a single individual to drop somewhere out of our observation ready to come up somewhere else in a week or month, increased to quite a family.



ELWES' SNOWDROP. (GALANTHUS ELWESII)

My remedy is tobacco dust from the cigar manufacturer and every plant that is infested is placed in a box or any convenient receptacle, on its side if tall, completely covered with the dust and left in this way for a day or two. Whenever I buy any chrysanthemums I treat them to the tobacco burial if any aphids are found on them, and sometimes even if I do not see any I take this precaution and it has always proved permanently effectual. I have tried pyrethrum and have seen these aphides completely covered with it crawl up on the plants and come out alive and sound.

There is no doubt that florists can keep down these aphides with less present cost, but I think it is much more satisfactory to finish them even at a considerable extra expenditure and it certainly will be much better for their customers.

WM. F. BASSETT.

Hammonton, N. J.

#### A Standard Classification for Plants.

It is customary with all trades dealing in articles of varying quality, to have a standard classification for such merchandise, that the quality may be readily determined by both buyer and seller. In no trade is this more necessary than that of the florist, nearly all of whom buy and sell more or less stock at wholesale. "Roses in 2½ inch pots" may be fine young plants or they may be rooted cuttings recently potted off, or they may have been in 2½-inch pots for many months and still be practically worthless.

It is to the direct interest of all honest sellers as well as buyers that some tangible standard of quality shall be established that shall classify such plants, and determine their quality. Can not it be done? G.

#### Galanthus Elwesii.

The species of snowdrop at present known are confined to *Galanthus nivalis* (the common one), *G. plicatus*, and *Elwes' snowdrop* under notice. The latter is the finest of the genus, looked at from various points of view. The size, peculiar markings and general conformation of the flowers may be seen by reference to our illustration. The whole flower, when newly expanded, is ellipsoid in outline, while forms with a short globose flower may occasionally be found.

When the flower is fully expanded, the three outer segments become spreading, exposing the inner three, which are much shorter, nearly erect, beautifully lined with green internally, while externally they are furnished at the base and apex with an intense dark green blotch, which, contrasting with the pure white of the rest of the flower, gives it a charming appearance. The broad glaucous green leaves are very fine. The inferior ovary at the flowering stage is oblong or somewhat top-shaped; but a flower at the lower right hand corner of the illustration exhibits a globose ovary, and it was of the same age as the others when drawn.

The short inner segments of the flower of the snowdrop constitute the chief dif-

ference between it and the snowflake (*Leucocolum*). *G. Elwesii* is a native of Asia Minor, and is quite hardy in this country. It is a recent introduction compared to the other two species, having been imported in 1875.—*Gardening World*.

#### Plant Culture.

It sometimes seems rather puzzling why a cultivator should succeed with a particular plant, when his, it may be almost next-door neighbor, attains but a very meagre degree of success; and this, too, after the most careful and unremitting attention on his part. Clearly there are some circumstances or conditions to which the plant cannot adapt itself. Now whether it be the comparative absence or excess of heat, light, moisture, or ventilation, this the cultivator ought to strive to find out. Old and experienced hands can very often tell from the general appearance of a plant what kind of treatment is likely to suit it; they know that a plant which has leathery shining leaves will withstand a great amount of light, the same of thick fleshy leaves; besides, they would not suffer so much from any temporary want of water as would a plant with thin soft leaves, with very little stock of reserve materials to fall back on; or, again, gardeners would not heavily syringe hairy or woolly-leaved plants. These indications also afford a pretty good idea as to the plants' requirements in regard to water and atmospheric conditions. Of course in a glasshouse it is rather difficult to reproduce in our artificial way the conditions under which tropical plants luxuriate in their native habitats, yet the nearer we approach to natural conditions the more likely we are to succeed; therefore, in the culture of plants under glass, it is well to take into consideration the conditions under which they were found growing in their original home, and adopt them as a basis for our cultural operations, and, all other things being equal, success will follow.

To attain to any degree of excellence in growing plants cleanliness must prevail, for when they become infested with insects it is vain to look for satisfactory results. Having tried many insecticides it is but fair to say that I found most of them do all that they claimed to do, that is, if they are applied according to the directions given with them; but of recent years I have all but given them up, relying chiefly on clean water, which I find, if applied with sufficient force and persistence, is by far the least injurious, and most effective of all the insecticides I have tried.—*F. Ross, in Gardeners' Chronicle*.

Covent Garden Market, London, on May Day.

The different seasons have their special attractions in the Covent Garden flower market, but scarcely a better time than the present could be chosen for an early morning visit. On May 1 the market was particularly full and busy, plants and flowers being apparently in strong demand. Amongst the plants marguerites in 48 and 32-size pots were remarkably numerous, fine graceful little bushes well flowered, and especially valuable for decorative purposes and window boxes. Pelargoniums, both zonals and decorative or regal varieties, contributed a wealth of color. Cinerarias also afforded some rich tints, with fuchsias, spireas in thousands, capital dwarf hydrangeas with large heads of pink flow-



ers, deutzias, heaths and rhodanthes. The last named, particularly the white variety, are great favorites, and grown as the plants are in frames they have not the drawn thin appearance so frequently seen in gardens. Forced plants of *Lilium caudatum*, with the pure *L. longiflorum*, also occupied a considerable space on several stands. The foliage plants were chiefly palms, such as kentias, *Geouoma gracilis*, and *Cocos Weddelliana*, with ferns (*adiantum*s and *pteris*es), the much-enduring *aspidistras*, and *Cyperus latus* or *alternifolius*.

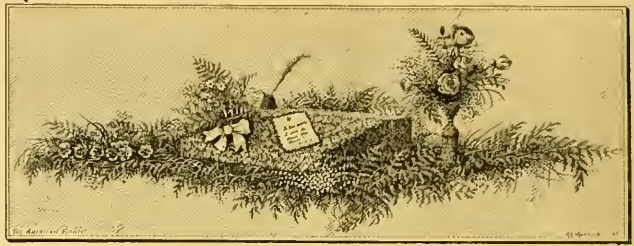
The cut flowers were also in strong force, daffodils and wallflowers nearly sharing the honors in point of numbers, but the latter were in the majority, for some of the larger growers took the market by storm, bringing some wagonloads of stout bunches of dark fragrant flowers. Daffodils were there in all shades, from white to the richest golden form of the trumpet flowered section, together with the delicately pretty poeticus varieties. Forget-me-nots, roses, violets, gardenias and stephanotis were prominent in other directions, while of hyacinths there were some hundreds of boxes, showing that the exportation of flowers from Holland to this country has by no means been stopped by the society formed for that purpose, though it has probably been checked. On the previous day a large sale was held in the market, when shallow boxes containing several dozens of spikes were sold at from 1s. 6d. to 4s. each, the white varieties realizing the latter price.—*Journal of Horticulture*.



Timely Hints.

All the kinds of calanthes, which as a rule should have been potted a month or so ago, will now be making good growths and forming young roots, and should have increasing quantities of water and heat, with shade, to induce them to form large bulbs; toward the end of summer when they are fully developed the quantity of water should be gradually reduced and more sunlight and air given to ripen them off. If well grown *Calanthe Veitchi* will give spikes more than three feet in length, bearing from thirty to upwards of forty flowers. Some one has, and I think very inaptly, likened this variety to the bleeding heart, which, if the case, would not leave it to be less admired for its grace and beauty; the two are however quite distinct in appearance.

*Cœlogyne cristata*—now making its growth should have copious waterings, in fact should be hosed over twice daily, or three times in very hot weather until the bulbs are completed, when only enough water should be given to keep the material in which they are grown moist. The shading should be removed, or the plants set in a sunny airy house, as a thorough ripening of the bulbs—without shrivelling—is essential in securing a good crop of blooms; in fact, a lack of proper maturity is largely the cause of failure to flower well.



DESIGN FOR THE FUNERAL OF A JOURNALIST

*Dendrobiums*, especially *Wardianum* and *nobile*, the two most useful kinds for the florist to grow, should be given the hottest place in the house, in order to get the growths made as soon as possible, that they may be well ripened up during the fall months so that they may be bloomed during winter when the flowers are most salable. In order to get strong shoots they should be kept growing vigorously from the start; they need plenty of water and should be syringed over lightly three or four times daily in fine weather while growing. The directions for ripening *cœlogyne* will apply to these.

*Peristeria elata* should have been kept moderately dry up to this time so as to prevent its starting as long as possible; the flowers are more desirable in the fall than in summer, its natural time of flowering, and as the flower spikes show soon after the plant starts into growth, it is best to retard it as long as possible. By this process they may easily be had in bloom in September or October, but at this late season care must be taken to give the plants extra heat to finish the growths, which will have been nearly at a standstill during the period of bloom. They do well in rough chopped sods, moss and well rotted cow manure, with thorough drainage, and need plenty of heat and moisture when growing, but should be kept nearly dry when not growing, to prevent rotting of the pseudobulbs.

*Cattleya Trianae* will now be growing and the moss should be kept wet and plants syringed over head twice daily in fine weather, when air can be given to dry them off occasionally; it does no injury under such conditions, and keeps the plants looking clean and bright.

*Lycaste Skinneri*, *Odontoglossum Alexandre*, and most of the *cypripedium*s will all be making new growths and should be treated liberally at this season. If the plants have not been repotted, or where this is not needed, at least "titled" up with a little fresh moss it should be attended to at once, so that the new roots will get the benefit of the new material, as the young growing points are destroyed if they come in contact with old sour potting stuff. It is well to let the plants get partially dried out every few days to prevent the moss from getting soured.

Pieces of split carrots or potatoes should be laid about the shelves among the plants, or what is perhaps better, little heaps of bran or meal should be put in convenient places to trap slugs. Con-

stant care is necessary at this season to keep down the pests and keep them from destroying the young roots.

Malden, Mass. BENJ. GREY.

#### Preparing Peat for Orchids.

In preparing fibrous peat for orchids, the old way of chopping it to the proper size with a hatchet is very slow and does not do the work well. Running it through a hay-cutter is just the thing. Try it.

Cincinnati. JOHN BAUSEN.

#### Design for the Funeral of a Journalist.

The design illustrated was used at the funeral of a Milwaukee journalist, and was arranged by Mrs. C. B. Whittall of that city. The desk of ivy leaves rests on a plateau of ferns, at one corner of which is a bunch of lily of the valley and at another a group of pansies. A bunch of *freesias* is attached to the desk by a bow of ribbon, while a small vase of loosely arranged flowers and ferns stands at the right. The letter lying upon the desk bore the words "Next week I will be above the clouds," being an extract from a letter written by the young man shortly before his death, and when he expected to repair to a resort in the mountains of Colorado for the benefit of his health.

#### The Tulip.

(Extracts from a paper read before the Horticultural Club of London, by J. Polman Mooy, Haarlem, Holland.)

The early single tulip sorts which, for the purpose of bedding out, are most suitable and bloom pretty well at the same time together are the following:

Scarlet, crimson and vermilion—*Vermilion Brilliant*, *Belle Alliance*, *Artus Brutus*, *Crimson King*.

Pure yellow—*Chrysolora*, *Canary-bird*, *King of Yellows*, *Pottebakker*, *Yellow Prince*.

Pure white and rosy white—*Pax Alba*, *Pottebakker*, *Snowball*, *Queen Victoria*.

Soft rosy red of various shades—*Prosperpine*, *Adeline*, *Cramoisi pourpre*, *Epaminondas*.

Shades of violet—*Wouwerman*, *Van der Neer*, *Paulus Potter*, *Moliere*, *President Lincoln*.

Rose and white or pink—*Rose lusante*, *Cottage Maid*, *Rose Griselinde*, *Rosamunde*, *Princess Mary Anne*.

Red and yellow bordered—*Keizerskroon*, *Duchess of Parue*, *Leonardi da Vinci*.



SPRING SOUVENIR BASKET

Various variegations—Belle Alliance rectified, scarlet and gold; Bride of Haarlem, cherry and white; Duchess of Austria, orange and red; Globe de Rigaut, white and violet; Golden Standard, gold and scarlet; Silver Standard, white and red flamed.

Sweet-scented tulips—Tulipa Florentine, Bixard Pronkeri, Prince of Austria, Yellow Prince.

The above named and many more tulip sorts are also much used for forcing in pots.

Of the class of single early tulips there is a most numerous variety in almost all shades of colors and although fifty years ago a good many varieties existed, during the last fifty years the most striking and most beautiful sorts now so much in esteem, have been raised and have been brought in use, nay, the sorts of these last years' raising are certainly very great improvements upon the older varieties.

During the last few years a little collection has been formed of tulip sorts with variegated foliage of which some sorts are very conspicuous and decorative indeed. It appears that this class is not so much known, but some of them are very fine for decorative purposes. The Yellow Prince with variegated foliage is indeed a real beauty, while Purple Crown and Silver Standard, La Precieuse, etc., all with variegated foliage, are also very fine. This class has an important advantage over the others, because they are decorative independent of the flower, and therefore their decorative property lasts longer and begins earlier than all others. It appears to me that because they are not much known in the floricultural world, they have not yet engaged the attention so much as they deserve.

The double early tulips now in cultivation are not so numerous in variety as

the single, but some of them are indeed very beautiful and highly attractive by the very large size of their rose shaped flowers, and also by their very fine combination of colors. Some of these double tulips are most suitable for planting out in beds, by their short growing habit and the very sharp and well distinguished colors, which makes them extremely suitable for what is called "carpet bedding."

The following early varieties are very dwarf growing and together grow very uniform, all of the same height and coming into bloom at the same time: Rose Blanche, pure white; La Candeur, white; Agnes, brilliant scarlet; Rubra Maxima, deep red; Rex Rubrorum, dark red; Queen Victoria, purplish red; Murillo, rose; Tournesol, red and yellow; Lac van Haarlem, pure violet; and many more. When planted in beds all sorts of figures in distinct colors can be made of them after certain designs.

Of the tall growing "double late" sorts, which are not so well adapted for carpet bedding, because of their tall growth, some are extremely beautiful, among which I may mention Mariage de ma fille, red striped with white; La Belle Alliance, white striped with violet; Yellow Rose, pure yellow, and so many more which, when planted in front of or between shrubberies, produce a very fine effect.

There is a singularity in tulips which belongs to no other flower and which, as experience shows, produces an extraordinary inducement to lovers of flowers for their cultivation and improvement. The seedlings generally, when they first bloom, produce flowers without any stripes or markings, but with a yellow base, the upright portion of the petals being self-colored brown, red, purple,

scarlet or rose. In this state, when they have been grown for years without variation, they are called "Breeders," or "Mother tulips." These are planted every year until they break into stripes, when, if the markings are fine or different from any one known, they receive names and are taken up in the existing collections. It is often so many years before they break and the multiplication in the breeder state is so rapid that the border soon becomes filled with this self-colored variety. Each tulip grower who has broken seedlings claims, and has a perfect right to give it a name, but some confusion naturally is brought on, because of the fact that different names have been given to those that have broken almost exactly alike. In a bed of a hundred seedlings it is not probable that any two will be very nearly alike in their markings, which uncertainty adds greatly to the charms of tulip cultivation.

#### Spring Souvenir Basket.

The basket represents a shell in form, and is composed of white and brown rush combined with fine willow. It has two curved handles in front converging at top with one at back. It rests on a four-legged stand. The small pocket in front forms the point of the shell. It is filled with blue pansies, and the main basket with Beauty roses, Jacqs and lily of the valley. There are lilies and roses in the bow which finishes the handle. It is a very graceful design and is introduced by Humphreys, of Sixth Avenue, New York.

#### Heating and Ventilating Greenhouses.

BY JOHN N. MAY.

The heating of greenhouses is a subject which has always been of great importance to the cultivator, and although it has been often and continually discussed by the horticultural press both in this country and in Europe yet it is a subject we do not all rightly understand or apply in the best and most economical way. I do not know that I can advance anything of particular interest to this body but will endeavor to give a brief review of what I have observed and learned in my experience in that line.

The first and most important thing is a good boiler; and here I would remark that I think there is plenty of room for improvement in any boiler yet on the market. A boiler to give the best satisfaction should have fully one third more heating capacity than is ever really required of it in any weather we may get. If I wanted to heat a house requiring 800 feet of 4-inch pipe I would use a boiler fully equal to heating 1,000 to 1,200 feet of pipe; this in some measure avoids driving the boiler to its full capacity, thereby burning fuel to waste.

A boiler to be economical should have a large grate surface, quick draught, with as much surface exposed to the fire as possible so as to extract all the heat from the fuel before it leaves the boiler. In many cases combustion does not take place till the flame is entering the flue; this is absolute waste of fuel and heat, and where it takes place is a sure sign that the boiler is not powerful enough for the work it has to do, or else there is too little pipe in the house to heat it properly. There is a great diversity of opinion as to the best form or shape of boiler, but it is pretty generally conceded among practical men that a boiler to be



economical should have a large surface for the fire to travel over before leaving it to enter the flue or chimney; and it is a well established fact that the boiler should not be so constructed as to impede or obstruct the free current of flame passing over all its surfaces.

The best authorities on this point after very careful study tell us that the nearer a boiler is constructed on the model of the present marine boiler, the closer we are to what expert engineers claim to be the best slow combustion boiler. This form of boiler is, as probably many of you know, so constructed that the fire is in a water box, so to speak, at one end, the flame traveling from the fire box under the main body of water its whole length and then returning through tubes at a higher elevation directly over it and entering the flue or chimney directly above the fire box. In this form of boiler the flame has to travel the whole length of the boiler and return, but its only check is at the end where it has to rise from the lower flue and return through the tubes; whether used for steam or hot water, this form certainly has many advantages, but for slow combustion I think it much better to have the return tubes not less than four inches in diameter. They are usually made not more than three inches even in large boilers, and while it may be large enough for steam boilers requiring a very quick draught to run at high pressure, I would prefer fewer tubes of larger size for slow combustion boilers. Many practical men who have tried the larger tubes have found them an improvement over the usual small tube. The size of the boiler must depend on the amount of work it has to do.

Next to a good boiler the most important thing is a good chimney, which should be of ample size and sufficient height to cause a good draught at all times. In building the chimney many suppose that a few hundred bricks and proportionate amount of mortar is all sufficient—the less used, so much money saved. This is a great mistake, as it simply means more consumption of fuel each and every year as long as it stands, whereas a few feet more added to the chimney in the first place is one expense only.

The relative value of hot water and steam as a means of heating greenhouses seems to find advocates with decided claims of advantages for their respective choice, and I have no doubt the gentlemen present are divided on that point. But after endeavoring to get all the information I possibly can on this point from all I meet with who have tried steam, I think hot water is good enough for me at present.

In arranging the pipes for the circulation of hot water in greenhouses comes the third most important part of the whole, and here I would remark that whether it be hot water under pressure or simply circulation by gravity, I consider from my own experience that it is a great mistake to circulate on what is called the down hill plan. It is contrary to the principles of circulation so far as hot water is concerned; at least it is a well known fact that hot water is much lighter than cold, also that water as soon as it begins to warm begins to rise. In circulating hot water on the down hill plan it has to be carried to the highest point before entering the greenhouse and at this point the heat will always have a tendency to cling, even when forced very hard; and when enter-



VENTILATORS OPENING AT THE APEX OF THE ROOF, AS RECOMMENDED BY MR. MAY

ing the house at a down grade the house will always be found the hottest at the end next the boiler. In many cases it will be found to vary five or six degrees in 100 feet; this is easy to account for as the rapid evaporation of heat from the pipes cools the water very materially before it reaches the other end of the house, and the return will not balance it. But, when the highest point in the circulation is at the furthest end from the boiler, then the hot water has a natural tendency to get to that end of the house as soon as possible after leaving the boiler, and the result is a very much more even temperature all through the house. Another very important thing in connection with it, is that it will not take as much coal to drive the water this way as on the down grade. The best evidence I can offer in this is an actual comparison of the two systems under almost similar circumstances. Last year I had a range of glass heated on the down hill plan under pressure, at my own request though against the advice of the gentleman who contracted to do it for me. The result has been as described above, and this range has cost about twenty-five per cent more to heat this winter than any other houses of equal size on my place. At the same time that my houses were being fitted the same firm put in another heating apparatus—almost a counterpart of mine, excepting that in this case they carried the water to the furthest ends of the houses for the highest point and returned down hill to the boiler—and the owner assures me he has made an absolute saving in coal and labor of fully twenty-five per cent over any other equal amount of glass surface on his place. After a very careful examination of his

apparatus, and comparing it with my own, I am fully convinced that this great difference is wholly caused by the difference in the two systems of arranging the pipes. After nearly thirty-five years experience, with nearly every kind of boiler in the market, I have learned this most valuable lesson on hot water circulation, and hope my experience may be of some little use to others.

In conclusion I would never advise anyone to use a cast iron boiler for either hot water under pressure or steam. Another thing I would never advise is placing the pipes on or near the ground; and to bury or cover up any part of the pipes not absolutely necessary, simply means burning out so much fuel to waste, for there can be no practical use in making a water pipe hot and then burying it under the walk or ground to absorb the heat without materially benefiting the atmosphere of the house.

Distributing the pipes through the house is another important item and requires considerable judgment, taking into consideration the class of plants to be grown. Some advocate placing the pipes overhead, contending that as the sun heats the earth's surface from above, a heating apparatus should be constructed on the same principle, while others advocate placing the pipes all below, in such a position as to give all the heat possible to the roots of the plants. I have had some experience with both these methods and it has taught me to strike a medium between the two. In building I now endeavor to so arrange the pipes that they will distribute the heat as evenly as possible all through the house, without subjecting any part of it to an excess. One thing I am certain of

is that the more we study these things out, and follow nature's teachings, the more we shall be able to learn and apply with better results.

#### VENTILATING.

This as well as the heating of a greenhouse has often been a bone of contention among practical men, but gardeners and florists generally have understood this part of greenhouse arrangement better than the heating. As an evidence of this our predecessors of the early part of the present century advocated and practiced the system of ventilating from the ridge or apex of the roof, and to-day experience teaches us that it is the best place to ventilate though many even now think otherwise. I mean by ventilating at the apex of the roof, the opening of the ventilators at the highest point of the roof. The old plan to secure this was by means of a sliding sash made to run on rollers and held in place by means of a stout cord and weight to balance the sash in any position. Thus on a cold bright day it might only require these sashes to be open an inch or two, and all that was required was to let the sash slide down the roof, in a casing made to hold the sash in position, and the rope and weight held it in place. In our very changeable climate this method has its drawbacks. First, because every one has to be handled separately, and where there are several houses to attend to often in sudden changes requiring too much time to get around in season. Another disadvantage with this method is that in very severe weather they are quite apt to get frozen fast and cannot be opened without a great amount of trouble and time lost; the same holds good in sash hung at top and lifted singly with an iron rod.

To overcome these evils I some years ago decided to construct my houses so that the ventilators should hang at the bottom and open on the top and make the entire sashes movable from end to end. In doing this I reasoned that the old system of letting the heated air out at the highest point was the correct principle; the only improvement I could make was in moving the whole of the glass on one side of the ridge, instead of only part as in the sliding sashes, and with the improved ventilating machinery I had no difficulty in doing it. The result is that now we can raise the whole sash of a hundred-foot house with greater ease, and in the same time we could move two sash under the original plan and it has many other advantages also. We can regulate the amount of air or opening from an eighth of an inch to three feet—the depth of our sash. Moreover it never freezes fast or gets out of order. When I first proposed to ventilate my houses this way many growers and others laughed at the idea, and some gave me three months to change it in; others prophesied that my whole ventilating sash would be blown away the first stiff breeze we had; others again intimated that north winds would cause such a draught in the houses that I would be compelled to keep the ventilators closed in such weather or my plants would be smothered with mildew all the time. Well, that was seven years ago, they are there yet, no wind has ever affected them, I have never seen the day I could not give all the air that is necessary, and I do not think mildew bothers me as much as it does some other growers whose ventilators open differently from mine. Since I built my first houses this way some seven years ago there

have been hundreds of greenhouses ventilated on the same principle in this country, and where the same amount of care is used in attending to ventilation that is necessary under all circumstances, I have never yet heard a complaint raised against this plan.

In building a house this way it is necessary to raise the ridge plate sufficiently high above the sash to allow a narrow cap or coping to be placed on top; this is necessary to throw the water off, otherwise in heavy rains considerable water would drive in at the ridge where the sash shuts against the plate. In hanging sash on a greenhouse I would advise in every case the use of galvanized wrought iron butts with a brass pin, this will save an immense amount of trouble in after years, which always occurs where ordinary iron butts are used as they soon rust fast and get broken. And, in bad weather in the winter any of you who have tried to climb on to the roof of a greenhouse know the danger of trying the experiment; it is generally attended with more damage than occurs through a March blizzard.

One other great advantage I find in this system of ventilating is that my houses are much more evenly ventilated. In summer, by opening them full width, the houses are cooler than by any other system with the entire top of the house moveable. I have never found it necessary to have any front ventilators for such plants as roses, etc., so far as the health of the plants is concerned. The front ventilation is very useful for keeping a current of air circulating during the time men are engaged in cleaning out, replanting, etc., but I prefer to close any side openings as quickly as possible after they are through the heavy work. Some classes of plants are undoubtedly benefited by side ventilation, but not all, and experience has taught me that plants even as hardy as the camellia under certain circumstances, require the side ventilators to be handled with great care.

[Read before the New Jersey Hort. society, Orange, April 9, 1888.]

#### Hail Notes.

"After our experience with the blizzard last March," remarked a prominent Eastern florist, "there is no telling what we may get. I have examined your by-laws carefully and think the plan you have adopted a good one, and I intend to insure a portion of my glass at least although I have never been hit by hail."

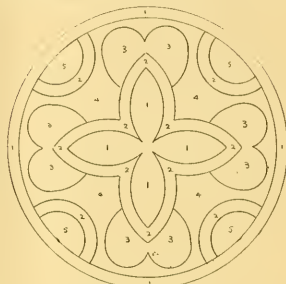
The "Florists' Hail Association of America" is one year old to-day (June 1). When first organized a letter of inquiry asked, "How many assessments do you expect to make in a year?" Had the writer joined he would have been insured for one year without paying any other assessment than the one paid upon becoming a member.

Every member of the Florists' Hail Association is personally interested in the success of the venture and if you want to boom hail insurance secure an additional member.

That the "Hail belt" is pretty broad is evident from the fact that the "Florists' Hail Association" has members in the following states: Iowa, Indiana, Illinois, Pennsylvania, Wisconsin, New Jersey, Michigan, Missouri, Connecticut, Kentucky, New Hampshire, Kansas, Minnesota, Ohio, Colorado, West Virginia, Massachusetts, Arkansas, Delaware and New York.

#### Fancy Bedding.

We give below a diagram of a circular bed which was planted last summer near the northern end of Drexel boulevard, Chicago. It was eighteen feet in diameter and was very attractive.



KEY TO DIAGRAM.

1. *Thymus argentea*. 2. *Alternanthera amœna*. 3. *Alter. paronychioides major*. 4. Variegated *alyssum*. 5. *Oxalis tropaeoloides*. An outside border of *Alternanthera amœna* surrounded the whole.

#### Preparing Potting Soil.

A correspondent writes: For the last few years we have used sod soil, two loads; fresh cow manure, one load, and mixed the same about May 1, for following winter's use. After mixing we gave the soil a good watering, which was repeated two or three times during the summer, to help rot the manure, keep it from heating and to hold the ammonia. We want to know whether we did wrong in watering the soil, or whether it would be preferable to allow the soil to lay dry all summer? Of course we did not water enough to make the soil sticky and sour, but just enough to keep it moist. [Keeping the soil moderately moist is considered preferable.]

Would above mixture be benefited by the addition of bone meal? [If not rich enough without, pure bone meal would be a good addition.]

In what length of time will bone meal have any beneficial effect on plants? [If incorporated in a soil kept fairly moist an effect should be noticed within a few weeks. If the meal is very coarse it will take longer. The bone must be partly dissolved by waterings before it is available as plant food, and the full effect will not be felt for some months.]

If used too freely will bone meal injure any plant? [Anything may be overdone, but pure bone meal would have to be used very recklessly to do any injury to most plants. But overfeeding should in all cases be avoided.]

TO KILL THE BLACK APHIS.—I succeeded in keeping the black aphid off of my chrysanthemums last season by frequently dusting the plants with fine tobacco dust.

J. M.

SHADING SMALL PALM HOUSES.—E. Weinhoeber, Chicago, shades his palm house by tacking cotton cloth on the inside of the sash bars. He finds it more convenient as well as cheaper than lath shades, and more enduring as well as more readily removed than any kind of wash on the glass. Separate pieces are tacked on the under side of the ventilators so as not to interfere with their use.



## Short Notes.

LOBELIAS are grown much more easily and quickly from seed than from cuttings.

FREESIA REFRACTA ALBA.—Messrs. Hillebrand & Bredemeier, Pallanza, Italy, send us a photograph of a well bloomed pot plant of this freesia, the plant being three years old. They state that they have had plants bearing 122 buds.

CYPERUS ALTERNIFOLIUS makes an excellent pot plant for fall and winter sales, as it stands well when used as a house plant during winter. Stock should be worked up now. Don't let mealy-bug get a start on them. Large specimens of this plant are also grand for decorating. They are easily grown.

NIEMENBERGIA GRACILIS.—This is an admirable little plant for baskets and vases. It blooms constantly all summer long and survives the trying conditions that basket and vase plants are subjected to as well as anything we know of. It is readily grown from seed which should be sown in boxes about February.

DRACENA FRAGRANS LINDENI.—This is a variegated form of *D. fragrans*. It grows yearly as freely as the last named and will undoubtedly take a prominent place as a decorative plant when grown in sufficient quantity and placed at a reasonable price. It is propagated in the same manner as *D. fragrans*, which was illustrated in last issue.

ANTS.—In reply to W. H., who is troubled with white ants, there are a great variety of remedies for these pests. Air-slaked lime dusted over the plant and soil when dry will cause the ants to vacate. Partially picked boiled bones if laid near their haunts will soon be covered with them, when they may be thrown into hot water. Before again placing the bones, let all the water drain off. This is a cheap remedy and if persisted in is very effectual.

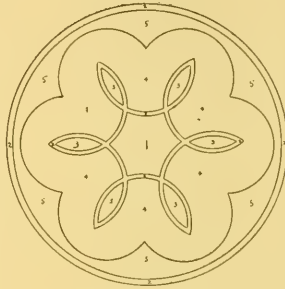
SALVIA.—*S. splendens* so commonly grown for use as isolated specimens or in groups on the lawn is not usually in full bloom until nearly time for frost. The time for blooming can be considerably hastened by keeping the young plants in rather poor soil and pot bound. They should be planted from a pot not larger than 3½ inches. Those grown at Lincoln Park, Chicago, are so treated and are in full bloom a month or six weeks earlier than those which are treated more liberally when small.

CYPERUS ALTERNIFOLIUS.—This plant, which is so much employed for decoration, can be, and often is, propagated by cutting off the heads of foliage and pegging them down into pots or pans of soil in such a manner that the base of the lower leaves is pressed closely to the soil. In this way young plants are pushed up amongst the old foliage, and when large enough they can be potted off. Though this system (as well as division of the roots) is very useful for the increase of the variegated-leaved variety, by far the better plan to obtain a stock of the green-leaved form is to raise the young plants from seeds, which can be obtained in considerable quantity, provided a few large specimens are grown for that purpose. The seeds should be sown as soon as they are ripe, for if kept out of the ground for a lengthened period they take much longer to germinate than if sown at once. Pans of light sandy soil, made level on

the surface, should be prepared for their reception, and on this the seeds must be sprinkled thinly, just covering afterwards with sand. So treated, and kept in a warm structure with a pane of glass over the pan, the young plants will not be long in making their appearance.—*London Garden.*

## Fancy Bedding.

The accompanying diagram is of a bed which last summer ornamented Drexel boulevard, Chicago. The bed was sixteen feet in diameter and the finely contrasted colors of the plants used made it a very attractive ornament.



KEY TO DIAGRAM.

1. Alternanthera versicolor. 2 and 3. Alternanthera aurea nana. 4. Thymus argentea. 5. Variegated alyssum.

## Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1887.

June 1.—Tem., morning 60°, noon 55°, evening 57°. Wind E. to NW. Continued taking up and heeling in tulips. Planted two ribbon beds with begonias.  
2—Tem. 57, 64, 59. N. Planted central foliage bed and some beds of annuals. Repotted gloxinias into 4-inch pots.  
3—Tem. 63, 77, 70. NW. to E. Planted two foliage beds and lined verbena beds with coleus. Planted mixed group in front of conservatory.  
4—Tem. 71, 78, 70. WSW. to E. Continued general bedding.  
5—Tem. 60, 57, 55. N. Sunday.  
6—Tem. 59, 66, 64. N. to E. Same as Saturday.  
7—Tem. 65, 80, 72. All hands busy planting carpet beds.  
8—Tem. 76, 86, 75. W. to SE. to NW. Same as yesterday.  
9—Tem. 57, 58, 54. N. Planted beds of begonias, torenias and geraniums. Lined beds with coleus and alysanthes. Potted a lot of gloxinias into 2-inch pots and plugged them in frame.  
10—Tem. 58, 60, 59. N. Continued general planting. Stowed away empty pots in shed.  
11—Tem. 61, 68, 70. E. to N. to E. Same as yesterday.  
12—Tem. 70, 85, 80. SE. to E. Sunday.  
13—Tem. 72, 80, 74. SW. to SE. Cleared several beds. Arranged empty pots in shed. Cleaned, topped and spread Cineraria candidissima.  
14—Tem. 67, 71, 72. NE. to E. Cleared frame yard and arranged pot plants there. Cleaned beds outside. Trimmed and cleaned foliage beds. Staked and tied hollyhocks.

15—Tem. 73, 90, 82. S. Standard roses commenced flowering. Planted erythras, canas, dahlias and caladiums in round beds. Cleaned and trimmed foliage beds.

## Southern California.

The four days between Sunday evening and Friday morning sufficed to convey me from Chicago via Kansas City through Kausas, Colorado, New Mexico and Arizona via Santa Fe route to Los Angeles, Cal. For the two years since I last wrote the FLORIST from this section I see little increase in the way of first class cut flowers; they are not yet to be had. The florists have been better real estate agents than flower growers and although the great rush of wealthy visitors as well as settlers has greatly increased the demand for flowers, the supply is still scant and poor.

The start is however being made, and now that the dull times are on in town lots, other ways to wealth are thought of. At least four concerns are now incorporated in or near the city to prosecute the nursery and florist business to some considerable extent. Some have made a year's start and will no doubt a year or two hence have something to show in the way of cut flowers as well as some of the many bulbs and seeds which can and should be grown here in successful competition with French and German houses. It will no doubt take five to eight years to get the skilled labor well at work in profitable channels, but I am satisfied it can and will be done. The field is here and if the right parties are not already begun those will surely come here who do understand the needs of the east and know how far California can be made to supply them. I shall write again after visiting San Francisco and Santa Barbara. J. C. V.

Los Angeles, May 21, 1888.

OREGON, MO.—The semi-annual meeting of the Missouri State Hort. society will be held here June 5 to 7. A very attractive programme has been arranged. An exhibition will be made in connection with the meeting.

## SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant ads. not admitted under this head.

SITUATION WANTED.—By first-class rose grower. Good references. Address Box 45, Clifton, N. J.

SITUATION WANTED.—By a thorough rose grower and plantsman. Best of references. Address C. C., care American Florist, Chicago.

SITUATION WANTED.—As gardener or florist. First-class man inside and out. 17 years' experience in America, north and south. References given and required. Address PLANTSMA, GARDEN, 21 East 13th St., Covington, Ky.

SITUATION WANTED.—As foreman or propagator in commercial greenhouse; good rose and cut flower grower; understands the shipping business; fair cut flower worker. Single, age 21. Address J. J., care American Florist, Chicago.

SITUATION WANTED.—For a reliable and practical gardener; German; ten years in America; experienced in all branches of his trade. First-class references. Suber and industries. Address MRS. H. WEBB, 78 Market St., Wilmington, N. C.

SITUATION WANTED.—By a thorough plantsman, florist and propagator, competent in all branches of gardening, either for grower or commercial. Married. Best of references. Address PLANTSMA, care A. W. Smith, Boggs Ave., 32 ward, Pittsburg, Pa.

SITUATION WANTED.—A German gardener and florist with 14 years' experience; single, and with best of references, would like a situation around Chicago, private or commercial. Address W. KIEHL, care Fred Schneider, Attica, N. Y.

SITUATION WANTED.—By a middle-aged German, gardener and florist, single; long experience. Best of references. Can do all at once if particulars are given in answer. First-class private place preferred. Address FLORIST, care National Hotel, Indianapolis, Ind.

**SITUATION WANTED**—A private place in Ohio or Pa., for a gardener, German; married; 30 years of age, one child. Well up in the departments of flowers, vegetables, grapes, and family help. 5 years with one family. Best of references.  
C. KRAMER, 753 Wick Ave., Youngstown, Ohio.

**WANTED**—Three thousand feet of second-hand 4-inch greenhouse pipe in good condition. Address F. H. MOSES, Bucksport, Me.

**WANTED**—Wholesale catalogues of plants, seeds, bulbs and greenhouse supplies.  
KARL KAYSER, Ansel Ave., Cleveland, Ohio.

**WANTED**—A reliable working florist (Protestant) to take charge of a small commercial place near New York.  
A. B., care American Florist, New York.

**WANTED**—An industrious young florist with good knowledge of greenhouses. A chance of promotion according to ability. No other need apply.  
WESTERN, care American Florist.

**WANTED**—An assistant for making up floral designs and for painting decorations. A liberal salary will be paid for competent help—male or female. Address N., care American Florist.

**WANTED**—Greenhouse boiler. A second-hand Carnody or Airlenton hot water boiler for greenhouse. State size, how long in use, present condition, and price.  
A. S. ESTERHOF, No. 30 East First St., Dayton, Ohio.

**WANTED**—An assistant to take charge of greenhouses containing 6,000 feet of glass. A desirable position for a live florist. In an enterprising city. Address care A. BROWN, cor. 7th and Grand Ave., Milwaukee, Wis.

**WANTED**—A first-class and experienced propagator of roses, clematis, coniferous and broad-leaved evergreens. State salary, and where formerly employed. Address  
CALIFORNIA NURSERY CO., Niles, Alameda Co., Cal.

**WANTED**—A thoroughly competent man can have either a working or moneyed interest in a growing business. The business having grown too heavy for the lady owner. Must come well recommended. Address LADY FLORIST care Am. Florist.

**WANTED**—A young man for general greenhouse work. Must have good experience, and be familiar with the growth and propagation of roses and bedding plants. Apply giving references and wages expected with board, etc. to EVERGREEN LODGE FLOWER GARDEN, Clarksville, Tenn.

**FOR SALE OR RENT**—Four greenhouses in good central location, in a city of 15,000 inhabitants. For terms, address CHAS. A. BROCKMAN, 230 N. State Street, Elgin, Ill.

**FOR SALE**—Large greenhouses and gardens, fully stocked, on about four acres of land, within an hour of New York. Address  
A. B., care American Florist, New York.

**FOR SALE**—A greenhouse property in northern Indiana, with 2,000 square feet of glass, in a city of 10,000 inhabitants, natural gas. For further particulars address  
G. C. LANGE, Peru, Ind.

**FOR SALE**—The best retail florist's and seedman's business in the Northwest (population 150,000). Reason for selling, with full particulars furnished on application. Address  
BATA, care American Florist, Chicago.

**FOR SALE**—To settle the estate, 4 greenhouses—about 6,000 square feet of glass—3,000 heated, and 3,000 as cold, in one acre of land. Grand railroad route, from which forty trains run to and from Boston daily. A good opening for the rich man. Address  
Box 45, Ayer, Mass.

**FOR SALE**—A good paying florist business; only 1 one in a town of 10,000 inhabitants; 5,000 ft. of glass, within six blocks of postoffice; want to sell in June or July; reason, not able to handle increasing business. Correspondence solicited.  
MRS. GEO. LOW, 508 South 1st St., Stillwater, Minn.

## New American Roses.

*Freesia Refracta Alba* and *Leichtlinii*.

**ROSES SOUVENIR OF WOOTTON and ANNIE COOK**, 3 1/2 in. pots, \$5 per doz., \$50 per 100  
4 in. pots, \$8

**FREESIA REFRACTA ALBA**, \$2.00 per hundred; \$15.00 per thousand.  
" **LEICHTLINII**, \$1.50 per hundred; \$12.00 per thousand.

Address **JOHN COOK, Florist,**  
BALTIMORE, MD.

**IMPORTER AND GROWER**  
**HYBRID PERPETUAL ROSES**  
**WILLIAM H. SPOONER,**  
Jamaica Plain, Boston, Mass.

## HERMOSA ROSES.

At \$3.50 per 100; \$30.00 per 1000.

Address **HERMAN SCHLACTER, Florist,**  
WINTON PLACE, OHIO.

1888.

## ROSES FOR FLORISTS.

We offer the largest and most complete stock of Roses in this country. Straight 2 1/2-in. plants, propagated from thoroughly matured field grown plants, and grown in ordinary soil without manure or other stimulating material. They resist disease, start quickly, grow rapidly and give best results.

**ALL THE LEADING VARIETIES** in large supply at very reasonable prices—*Am. Beauty*, *Papa Gontier*, *Golden Pearl*, *W. F. Bennett*, *The Bride*, *Her Majesty*, *La France*, *Genl. Jacqu.*, *Perle des Jardins*, *Niphotos*, *C. Mermet*, *M. Robert*, *Pierre Guillot*, *Souv. d'un Ami*, *Sunset*, *Mad de Watteville*, and hundreds of others.

**ALL THE LATEST NEW ROSES**—*Luciole*, *Mad. Etienne*, *Mad. Scipion Cochet*, *Mad. Claudine Perreau*, *Docteur Grill*, *Vicomtesse de Wautier*, *Baroness de Foville* and all choicest varieties.

**HYDRANGEA GRANDIFLORA**—*A Specialty*.—Immense stock, strong, open ground plants, all sizes, very low. *Also Buists Variegated Leaved Althea*, *Japan Judas*, *Japan Snow Ball* (*Viburnum plicatum*), *Japan Rose* (*Rosa Rugosa*), *Japanese Eulalia*, and a full line of all the best *Hardy Shrubs* and *Climbing Vines*, including *Ampelopsis Veitchii* (*Roston Top*), *Achille Coisade*, *The New Italian*, and other *Sweet-Scented Honeysuckles*, etc., etc. *New Violets*, *Chrysanthemums*, and *Hardy Phlox*.

Special Wholesale Price List free on application to Florists, Market Gardeners and Dealers only. Lists priced, special selections made, correspondence solicited. Address

## THE DINGEE & CONARD CO.,

—: ROSE GROWERS. —

WEST GROVE, Chester Co., PA.

## THE THREE B. B. B's.

BRIDE, BEAUTY, BENNETT,

Still rank as the three best roses of recent introduction for forcing. 1 also offer

PAPA GONTIER, PURITAN, METEOR,

And all other new and standard varieties of Teas, Hybrid Teas, Hybrid Perpetuals, etc., etc. that are desirable for the trade, in extra fine plants at reasonable prices. I also offer for the first time

COLUMBIA (NEW 1888.)

A bedding rose of very superior merit. For description, prices, etc., etc., write for Trade List to  
**JOHN N. MAY,**  
SUMMIT, NEW JERSEY.

## JAMES L. BOYSON,

CAEN, (CALVADOS) FRANCE.

1st Prize for Cut Blooms, Paris, May, 1887.

My CATALOGUE OF THE NEW

## EUROPEAN ROSES

will be ready January 1, 1888, and will be sent FREE on application.

A large stock of the last two years varieties, as well as all the older kinds for sale.

Send for my complete Catalogue of over 1,200 varieties, with raisers' names and date of sending out

## ROSES.

## JAMES MENDRICK,

FONT GROVE,

Near Slingslands, Albany Co., New York,

HAS ABOUT 20,000 ROSES

From choice, healthy stock that he can with confidence recommend to the trade, such as

PERLES, BRIDES, MERMETS, SOUVENIRS, LA FRANCE, SUNSETS, AMERICAN BEAUTY and BON SILENE,

In lots to suit those who want. The stuff is all in 4-inch pots—true to name, and just as represented. Those who want plants will not regret sending an order. Prices reasonable.

ADDRESS AS ABOVE.

## OUR NEW TRADE DIRECTORY

Contains over

6,000 Names of (Live)

Florists, nurserymen and seedsmen, in the United States and Canada.

PRICE ONLY ONE DOLLAR.

AMERICAN FLORIST CO., Chicago.

1888.

Perle des Jardins all sold for this season.

I HAVE A SUPERB STOCK OF LA FRANCE

in gills and half pints at \$8.00 and \$10.00 per 100.

Address **J. KADLETZ,**  
P. O. Box 170. STAPLETON, STATEN ISLAND, N. Y.

## \* FOR SALE. \*

3,000 SMILAX. 1,000 PERLES.  
1,000 HERMOSA. 1,000 NIPHOTOS.  
1,000 LA FRANCE.

Address **THE FLORAL EXCHANGE,**  
614 Chestnut Street, PHILADELPHIA.

## PERLE DES JARDINS. ROSES A SPECIALTY.

Vigorous and robust young plants, propagated from healthy stock, which was never afflicted with Black Spot, nor produced bull-heads. Thumb pots, \$5.00 per 100; 3 1/2 pots, \$10.00 per 100. Also *La France*, *Niphotos*, *C. Mermet*, *Bon Silene*, at same rate. *Papa Gontier* 100 to \$15.00 per 100. Discount by the 1000.

**J. KADLETZ,**  
Box 170. STAPLETON, Staten Island, N. Y.

## NOVELTIES IN ROSES.

All the latest new varieties; also the leading forcing varieties *Teas*, *Hybrid Teas* and *Hybrid Perpetuals*.

Novelties in *Chrysanthemums*. Catalogue specialties at lowest rates.

Trade List now ready, mailed on application.

**JACOB SCHULZ, LOUISVILLE, KY.**

## 25,000 Forcing Roses for Florists,

2 1/2 in. pots. Per 100  
*The Bride*, *Perle des Jardins*, *La France*..... \$ 4.00  
*Souv. d'un Ami*, *C. Mermet*..... 4.00  
*Francis Bennett*, *Duke de Connaught*..... 10.00  
*Mad. Watteville*, *Etoile de Lyon*, *Malmaison*..... 5.00  
*Sombreuil*, *Hermosa*..... 5.00  
*Adian Tea*, *Queen Scirel*, *Siffrido*..... 4.00  
Also 12 of the best new *Chrysanthemums* at..... 5.00  
ED. MORAT, 719 Fourth Ave., Louisville, Ky.

## E. BENARD, ORLEANS, FRANCE.

ROSES ON THEIR OWN ROOTS A SPECIALTY.

NURSERY STOCK OF ALL DESCRIPTIONS

For particulars apply to  
**E. BENARD, JR.,**  
P. O. Box 1400. San Diego, Cal.

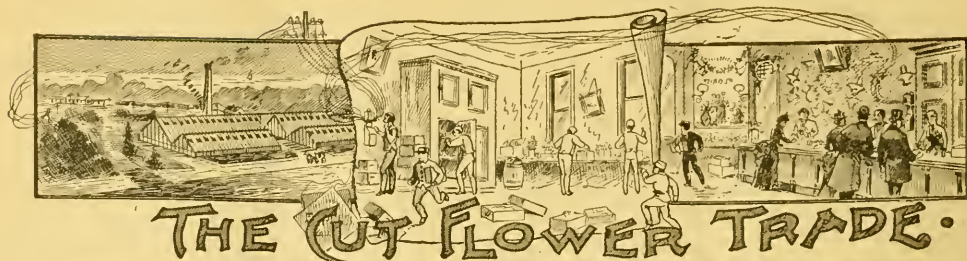
## Cape Cod Pink Pond Lily

For price list, Plants and Cut Flowers, address the original cultivators.

**CHIPMAN BROS.,**

SANDWICH, (Cape Cod), MASS.





## June Floral Fashions.

White blossoms are more used than colored ones, particularly for room decoration. There is no time in the year when apartments are so handsomely embellished with flowers as in the spring and early summer, when out of doors growth is so plentiful. Boughs of dogwood are formed into wedding bowers and are altogether the most æsthetic material yet employed for this purpose. May bells are also quite fashionable for weddings. These are a chime of three bells of different sizes and different white flowers, the ropes being of white satin ribbon. Lily of the valley, daisies and rosebuds are the flowers of which the bells are composed. A wreath of apple blossoms made narrower at one side and swung diagonally, is another device quite in vogue for weddings.

The arrangement of rooms is with different white blossoms, for instance, one apartment will be decked with lilies, one with hybrid roses—Puritans and Mabel Morrisons, and another will be ornamented with daisies. Libraries are embellished with foliage, or quiet flowers such as pansies. Where there is an end window, stained glass effects are accomplished with pansy panels. This is a grand way to exhibit the splendid crop of pansy seedlings.

Bouquets of white lilacs are the most stylish for brides. These are made large and loose and are finished with white satin ribbon. Bridesmaids carry purple and pink lilacs, the latter being produced in Washington. Brides wear lilacs in their hair, the sprays falling over the veil at the back. Bridesmaids, at full dress weddings, also wear blossoms in their hair to match the flowers they carry. There is generally a spray at one side. When little girls are maids of honor they are crowned with a full wreath of flowers, usually moss rosebuds, or Mignonette roses. Head wreaths require very careful arrangement, otherwise they are clumsy.

A new steamer basket appears which is round, has a scalloped edge and no handle. The center of the basket is filled with fruit and in each scallop is a cluster of spring flowers, pansies filling one scallop, lilies another, narcissus another, etc. A box of large roses sent as a farewell gift to a friend departing, is immediately placed in the ice box of the steamer, a few roses are taken out daily. Sending so much fruit to steamers seems quite unnecessary, as an abundance of it is provided and is always on the bill of fare two or three times a day. It is ridiculous to load a floral basket with lemons and strawberries which are served in proportion at luncheon and dinner. Lemons are to be had freely at any hour if desired. A cluster of grapes is ornamental in a basket of flowers. Flor-

ists should advise customers in this matter.

The decline of the street corsage bouquet among tastefully dressed women has been brought about by those who have overdone the wearing of floral bunches on the promenade, in shopping centers etc. A blaze of jonquils like a head light, can be seen a block and these have been attached to the bodice near the shoulder, sometimes. Those who delight in wearing flowers, at present put them on under a wrap, and some men are wearing boutonnières inside the coat, because of the display made with large ones. Fashionable boutonnières are very small for street wear. Quiet but elegant styles prevail in the street. For evening dress or carriage dress the corsage bunch holds its own and is worn large. It is never seen on one side of the breast however, but is worn at the waist, or where the plastron is finished.

New York. FANNIE A. BENSON.

## Cut Flowers in England.

At the Covent Garden market, London, the demand is for the greatest possible variety of flowers—any which are solid enough to stand transportation—and in consequence immense quantities of plants are grown which appear almost unknown on this side of the Atlantic, at least for the growing of cut flowers. The only plant grown here which is totally unknown in England (except in botanic gardens) is smilax (*Myrsiphyllum asparagoides*).

The flowers of scarlet and white geraniums are sent to market in enormous quantities. Double white and red primula flowers are much admired and sell well, also the large flowered pyrethrums of all colors. The demand for forced roses is not equal to that in our markets, but a much greater variety is required, H. P.'s of large size and brilliant color and M. Niels being as a rule preferred to any of the teas or Bennett's hybrids. Among the plants or flowers much less commonly grown here are gardenias and stephanotis which are there produced in immense quantities; ericas and epacris are also grown by the million. A few pretty sprays of Erica Willmoreana at the last chrysanthemum show in Philadelphia attracted much attention and seemed to be greatly admired. Would it not pay to grow them for cut flowers here on a larger scale than has yet been attempted? Among other English cut flowers are the lovely white and rose laperagias, ixoras, allamandas, bongaivilleas, anthuriums and dipladenias, all of which are splendid but rarely used here as cut flowers.

It may take some time to introduce orchids in very great variety, but such cheap, easily grown sorts as *Dendrobium nobile*, *Odontoglossum Alexandre*, cel-

ogynes, calanthes and cattleyas could be managed most profitably by any one who has a cool greenhouse and they would add a distinct charm to the florists' window.

Poor indeed must be the taste of that individual who ignores the fact that nature's chief charm is in the ever changing form and color of her innumerable gems, and is content to gaze year in and out on the same roses, the same lily of the valley and smilax, changing only in the number of dollars required to purchase them. Florists should in my humble opinion be leaders and not followers of public taste.

JOHN H. LEV.

## A Florist Grows Rich.

The florist who presides at the flower stand in the hall of the hotel finds his business here an extremely profitable one, and with these profits is raising a handsome building in Washington, where his greenhouses are situated. He brings here remarkably fine flowers, but he also asks remarkably fine prices, and a dollar apiece for roses is not a uncommon tax. At this rate it is somewhat of a strain upon the purses of young men to send flowers, but the purses seem to stand the strain, and meanwhile the florist grows rich.—*New York World*.

The above shows the reverse side of our business as against that indicated by the paragraphs on five-cent orders in recent issues. How happy the florist must be that the "purses stand the strain" while he is "raising" that handsome building. May we all prosper and meet in New York in August.

H. C.

## Floral Novelties for Lawn Parties.

Bird houses, which are easily made out of cardboard, and covered with vines and flowers (these being sewed on), are extremely ornamental placed on a tree or some rustic support. A camp kettle is also a very pretty design for the lawn. Any old iron pot filled with flowers drooping over its sides can be hung between cross sticks, which may be elaborately garlanded. A floral scythe looks graceful leaning against a tree, and a wheelbarrow, when trimmed with foliage and bedded with growing plants is effective.—*New York Sun*, May 6.

A reader who sends the above clipping says: "The enclosed clipping from the *New York Sun* gives some decidedly novel ideas in floral work; you will doubtless appreciate them. The only additional decoration I can suggest is a blue churn, lightly draped with greenery held in place by a moire sash, and filled with sunflowers, this creation to stand on a rustic soap-box, bearing the legend "B. T. Babbitts Best" surrounded by a floral wreathing."

**THE AMERICAN FLORIST**

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 Cents a Line, Agate;  
 Inch, \$1.40; Column \$14.00.  
 Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per  
 cent; 12 months, 20 per cent.

No reduction made for large space.

The Advertising Department of the AMERICAN  
 FLORIST is for Florists, Seedsmen, and dealers in  
 wares pertaining to those lines ONLY. Please to  
 remember it.

Orders for less than one-half inch space not accepted.

Advertisements for June 15 issue must  
 REACH US by noon, June 9, Address.

THE AMERICAN FLORIST CO., Chicago.

## Catalogues Received.

C. H. Joosten, New York, Dutch bulbs;  
 Quaker City Machine Works, Richmond,  
 Ind., ventilating apparatus; Hillebrand  
 & Bredemeier, Pallanza, Italy, bulbs;  
 James King, Chicago, baskets and sup-  
 plies; Ludwig Moller, Erfurt, Germany,  
 garden supplies.

NORTHWESTERN FLORISTS who intend  
 going to the New York convention via  
 Chicago should advise the Chicago club,  
 care of this office, that arrangements may  
 be made so that they may travel with  
 that club in a body from this point,  
 which will of course be much more pleas-  
 ant than traveling alone. If a sufficient  
 number signify their intention to go in  
 that way, a special train will be secured  
 from this point to New York. About  
 fifty Chicago florists will go.

## Attend to Your Correspondence.

We are altogether too frequently in re-  
 ceipt of letters similar to the following:  
 "I sent \$10 some three weeks ago to  
 John Blank, of Dashtown, who advertised  
 in the FLORIST and have not received  
 the goods nor any acknowledgement of  
 the receipt of the money; further, after  
 waiting a reasonable time I sent a postal  
 card asking if he had received my letter  
 and have been unable to secure any reply  
 to that. Is the party reliable? If so can  
 you tell me why he don't answer me?"

In each case of this kind we are  
 obliged to write two letters, one to the  
 complainant assuring him that the trou-  
 ble is due to negligence, etc., and  
 another to the advertiser advising him  
 to attend to his correspondence if he wishes  
 to retain the confidence of the trade. We  
 can stand a little of this, but it is grow-  
 ing monotonous. We do not undertake  
 to attend to the correspondence of ad-  
 vertisers for them. Self interest if not  
 common courtesy should prevent any such  
 state of affairs. If you receive an order  
 and are unable to fill it at once, it takes  
 but an instant to mail a postal card stat-  
 ing the fact. The one who sent the or-  
 der then knows what to expect, and if his  
 affairs are in such condition that he can-  
 not wait he can order elsewhere. The  
 man who neglects his correspondence is  
 not the man who builds up a large busi-  
 ness. We personally know of many  
 cases where neglect to promptly answer  
 letters in regard to small orders has lost  
 the recipient large orders which he would  
 have been overjoyed to receive.

If it is too much trouble for you to at-  
 tend to correspondence, please do not  
 advertise in this paper. We wish no ad-  
 vertiser who can not fill his orders  
 promptly, or who when sold out, can  
 not cheerfully advise his correspondents  
 of the fact when they send him orders,  
 and promptly return any inclosure ac-  
 companying such orders.

## Wholesale Markets.

## Cut Flowers.

BOSTON, May 25.

Roses, Jacobs and Hybrids.....	\$17.00
" Pans.....	2.00
" Mermets, Perles, etc.....	6.00 @ 8.00
Carnations.....	1.00 @ 1.50
Camellias.....	.25
Stocks.....	2.00
Spiraea.....	3.00
Smilax.....	2.00
Adiantums.....	1.50
Perles, narcissus.....	2.00
Mignonette.....	1.50

Prices for Decoration Day much higher on some varieties.

NEW YORK, May 25.

Roses, Bon Silene.....	1.00 @ 1.50
" Gontiers, Souvs.....	2.00 @ 3.00
" Perles, Niphetos.....	2.00 @ 3.00
" Mermets, Brides.....	3.00 @ 4.00
" Jacobs.....	3.00 @ 5.00
" Am. Beauty.....	3.00 @ 5.00
Puritan.....	12.00 @ 15.00
Carnations.....	1.00 @ 1.50
Glaadioli.....	3.00 @ 5.00
Lily of the valley.....	2.00 @ 2.50
Heliotrope, mignonette.....	.50
Tulips.....	2.00 @ 3.00
Callas.....	5.00 @ 8.00
Smilax.....	10.00 @ 25.00
Longiflorum lilies.....	8.00 @ 10.00
Dutch hyacinths.....	3.00 @ 5.00
Moss roses, per 100 sprays.....	15.00 @ 20.00

CHICAGO, May 25.

Roses, Perles, Niphetos.....	\$4.00 @ \$7.00
" Mermets, La France.....	5.00 @ 8.00
" Bennetts, Dubouche.....	6.00 @ 9.00
" Bennetts, Dubouche.....	6.00 @ 9.00
" Bous, Saffrons.....	2.00 @ 3.00
" Am. Beauties.....	10.00 @ 20.00
Carnations, short.....	1.00 @ 1.50
Camellias, long.....	1.50 @ 2.00
Smilax.....	20.00 @ 25.00
Tulips.....	2.00 @ 5.00
Lily of the valley.....	3.00 @ 5.00
Callas.....	15.00
Adiantum ferns.....	1.00
Cape Jessamines.....	2.00 @ 1.00
Poet's narcissus, single.....	2.00
Poet's narcissus, double.....	2.00
Peonies.....	10.00 @ 12.50

PHILADELPHIA, May 25.

Roses, Bon Silene.....	\$2.00
" Perles, Niphetos.....	3.00
" Bennetts, La France.....	6.00
" Mermets.....	5.00
" Gontiers, Brides.....	6.00
" Jacobs, Niels, Cooks.....	10.00
" Souvs.....	4.00
" Cape Jessamines.....	15.00
" Mixed hybrids.....	5.00
Carnations.....	.75 @ 1.00
Lily of the valley.....	2.00
Smilax.....	4.00
Heliotrope, mignonette.....	.50
Callas.....	10.00

WM. J. STEWART,  
Cut Flowers & Florists' Supplies

## WHOLESALE

67 BROMFIELD ST., BOSTON, MASS.

CHAS. E. PENNOCK,  
WHOLESALE FLORIST,38 So. 16TH STREET,  
PHILADELPHIA, PA.

Mention American Florist.

CUT FLOWERS AT WHOLESALE  
N. F. MCCARTHY & CO.WHOLESALE FLORISTS,  
63 Bromfield St., under Hort. Hall, Boston, Mass.

We have made large contracts with the best Rose  
 growers about Boston to handle their entire stock  
 this season. Our stock will consist of Papa Gontier,  
 Bennett, Pierre Guillot, American Beauty, Merm-  
 met, La France, Malmaison, Cook, Bride, Niphetos,  
 Perle, Niel, Anna Webb and Grace Wilder pinks,  
 long stems other flowers in variety. We shall have  
 a particularly large lot of Mermets and Perles, so  
 that in sending to us when you fail to get them else-  
 where you will feel reasonably sure of getting them.  
 Unknown parties must give satisfactory reference  
 or we send C. O. D. Write for information.



## 10,000 LILACS

6c. per cluster or bunch.  
 Discount on large orders.  
 Terms cash. Or flowers will  
 be shipped C. O. D. Season  
 generally extends from  
 May 15 to June 1. Please  
 order before season com-  
 mences.

L. B. BRAGUE, Hinsdale, Mass.

Thos. Young, Jr., & Co.,  
Wholesale Florists,

INCORPORATED 1885,

20 W. 24th St., NEW YORK.



## W. S. ALLEN,

## WHOLESALE DEALER IN CUT FLOWERS,

36 EAST 23rd STREET, NEW YORK.

ESTABLISHED 1877.

Price List sent upon application.

LaRoche & Stahl,  
Florists & Commission Merchants

—OF—

## CUT FLOWERS,

1237 Chestnut Street, PHILADELPHIA.  
Consignments Solicited. Special attention paid to  
shipping. Mention AMERICAN FLORIST.C. STRAUSS & Co.,  
TELEPHONE 977. WASHINGTON, D. C.WHOLESALE ROSE GROWERS  
AND DEALERS.LARGE STOCK OF ALL THE NEW ROSES.  
Orders booked for young stock at special rates.HAMMOND & HUNTER,  
Wholesale dealers in  
Cut Flowers and Florists' Supplies  
51 West 30th Street, NEW YORK.WELCH BROS.,  
WHOLESALE FLORISTS,165 Tremont Street, BOSTON, MASS.  
We make a specialty of shipping choice Roses and other  
flowers, carefully packed, to all points in  
Western and Middle States.  
Return Telegram is sent immediately when it  
is impossible to fill your order.KENNICOTT BROS.,  
WHOLESALE FLORISTS.

ALL CUT FLOWERS IN SEASON.

Write for price list. Consignments solicited.

27 Washington Street, CHICAGO.

## CUT FLOWERS

The choicest Cut Flowers at lowest market rates  
shipped C. O. D. Telephone connection. Use A. F.  
Code when ordering by telegraph. For prices, etc.,  
Address,

J. L. DILLON, BLOOMSBURG, PA.

## Water Lily Blooms

— BY THE —

Hundred, Thousand or Ten Thousand.

Long experience in handling Water  
Lilies enables me to Guarantee  
Satisfaction.

WILL FURNISH BLOOMS ALL SEASON BY CONTRACT.

Write for prices and terms at once. Address

Wm. DILGER,  
SANDUSKY, OHIO.



## News Notes.

WASHINGTON.—The safe of Freeman the florist was robbed recently.

COUNCIL BLUFFS, IOWA.—L. A. Casper has now 78,000 feet of glass and is still building.

ERIE, PA.—The contract for supplying the city parks with plants and flowers was awarded May 10, to Joseph Eichenlaub.

DES MOINES, IOWA.—R. A. Rollinson & Co. have recently added three new houses; one, 60 x 17 and two 50 x 11 each.

MUSCATINE, IOWA.—Conrad Kranz has recently built three new carnation houses 50 x 11½ each, and a new brick boiler house.

CINCINNATI.—At the funeral of City Treasurer Albert F. Bahrer May 3, it is stated that flowers to the value of \$1,000 were used.

SAN DIEGO, CAL.—A flower festival was held in this city May 8-14. A floral yacht, made entirely of bulbous bloom was named the Amaryllis.

HARTFORD, CONN.—The Hartford County Hort. society will offer prizes amounting to \$155 at its chrysanthemum exhibition to be held next November.

LA CROSSE, WIS.—Mr. P. E. Steves, who has for the last four years been superintendent of Oak Grove Cemetery and greenhouses, has resigned his position owing to ill-health.

MINNEAPOLIS, MINN.—R. J. Mendenhall has built five new houses. Three are 91 x 20 each; one, 12 x 129, and one 50 x 10. He expects to build five more the coming summer.

ALLEGHENY, PA.—A plant portrait of Lincoln—somewhat different from that of two years ago—will ornament the city park again this year. The face is formed of echeverias in various sizes as before.

MILWAUKEE.—Lang & Sons have built four new houses. One, 150 x 10, for violets; two, 90 x 20, for roses, and one, 60 x 12, for propagating. C. Baumgarten has built four new houses containing a total of 3,436 square feet.

WILMINGTON, DEL.—The premium list of the Peninsular Hort. society for its first annual exhibition to be held in this city Sept. 18-21 next, has been published. Copies may be obtained from Charles S. Horn, secretary, Wilmington, Del. Competition is open to all.

DENVER, COLO.—Henry Lee has built a mammoth seed and implement warehouse with three floors 100 x 125 each. It is provided with an elevator 14 x 7, large enough to carry a loaded wagon and team, and with power enough to carry the same to the top floor.

MILWAUKEE.—Currie Bros. are now located in their new three-story building at 312 Broadway. The three floors and basement are each 100 x 30 feet. The building is provided with a good elevator, and a handsome office 16 x 24 feet is finished off in excellent style.

MONTREAL.—If the show of our Hort. society next November is not a success it will not be owing to a scarcity of plants being grown. Most of the gardeners around here have more chrysanthemums growing than they have glass to cover them with next November. The coming season must be indeed very unfavorable, if good chrysanthemums are not plenty in

Montreal, after the attention the plant has had at the meetings of the Florists' and Gardeners' Club the past winter. The question box was introduced at the last meeting, and is very popular.

CINCINNATI.—The Oakley Rose House Company made an assignment May 10, to Albert McCullough. Last winter a fire damaged the greenhouses to the extent of about \$2,000, and since then the stockholders have refused to stand any more assessments. The liabilities are from \$15,000 to \$18,000, and the assets about \$2,000 in personality and \$10,000 in realty. Charles L. Mitchell was manager of the company.

DAVENPORT, IOWA.—The florists of Moline, Rock Island and this city met recently and organized the "Tri-City Florists' Club." Officers were elected as follows: Chas. Dannacher, Davenport, president; Julius Staack, Moline, Ill., vice-president; F. L. Bills, Davenport, treasurer; J. T. Temple, Davenport, secretary. The club will meet the second Saturday of each month, and endeavor to benefit the trade in this section.

WASHINGTON.—Edward McQueeny, a florist, began suit May 15 against eight prominent property-holders for damages to the amount of \$7,500 for injuries to his property caused by the defendants having a certain tract of land near by so graded and filled up that the drainage was toward his property. The plaintiff avers that by means of their work a certain water course was dammed up and the water flowed on his property, destroying the foundation walls of his dwelling house, extinguished the fires in the boilers and thereby caused his plants to be frozen.

## Boston.

There is a scarcity of good roses. Hybrids and Jacqs are in good demand at figures which are well up toward winter prices.

The auction sales of plants draw large crowds and prices realized average high. The growers seem to be well satisfied with results so far.

Wilson of New York held his annual sale here on the 10th. As usual, at Wilson's sales, the florists were out in force from the whole country within a circuit of fifty miles.

C. V. Whitten, of Dorchester, is building two large new houses. He will heat them with steam using the Exeter boiler.

By the time this report appears Decoration Day will have come and gone, and unless all signs fail those who have taken large orders for cheap bouquets will look back upon their venture with anything but satisfaction. Such a late season has not occurred for many years and as the weather continues cool the prospects for out door flowers which are so necessary for this work are not cheering. Indoor flowers are not too plenty and high prices will probably prevail.

The May exhibition of the Massachusetts Hort. society was very creditable, being far ahead of last year's corresponding show. Probably the best individual exhibit was Mr. Zirngibel's collection of pansies, which were the most beautiful ever shown here and well merited the silver medal and two prizes which were awarded to them. C. M. Atkinson's azaleas were grand. A plant of *Admiral* three feet high and six feet across was superb. Another fine specimen in this exhibit was a plant of *Decora* which was a towering mass of color, nine feet high,

and which was awarded a silver medal. One good point about the latter plant was its freedom from tying. The slight irregularities in the outline constituted a charm never found in plants trained with formal exactness. James Comley showed a flower spike of *Agave Verschaffeltii* sixteen feet in height. Mr. Wheeler, gardener to J. H. White, showed some fine *gloxinias* in pots, also good *pelargoniums*. Wm. Martin's *pelargoniums* were particularly well grown stocky plants. The display of *calceolarias* was unusually attractive. First and second premiums for collection and specimen plants were taken by Thos. Clark and A. W. Spencer respectively. C. H. Hovey took first prize for tulips and J. H. Woodford first for collection of spring flowering bulbs. Mrs. E. M. Gill got first prize for a well-arranged basket of flowers. A basket of long stemmed carnations from Miss S. W. Story was arranged with artistic taste. W. J. S.

A FEW EXTRA COPIES of the printed report of the proceedings of the Chicago meeting of the Society of American Florists are in the hands of the secretary and are for sale at \$1 each to those who are not members, and at 50 cents each to members in good standing who may desire an extra copy of the report. Address all orders to Wm. J. Stewart, secretary, 67 Bromfield street, Boston, Mass.

## Hygiene of Plants.

An instructive lecture was delivered recently at Philadelphia by Dr. J. M. Anders on this subject. We clip the following report from the *Philadelphia Inquirer*:

After explaining away some of the absurd notions with regard to the effect of plants in dormitories, Dr. Anders explained that plants were beneficial in more than one sense. They exhaled a watery vapor which was especially beneficial in dwellings which were warmed by hot air. By experiment he found that plants materially increased the humidity of the atmosphere.

The lecturer then showed the evil results of dry heat in dwellings, quoting Professor Stillman as an authority. Dry heat causes a greater demand to be made upon the nervous system, and increases the liability to pulmonary complaints. The health-saving properties of ozone are well understood, and as plants, to a more or less extent, generate ozone they must necessarily add to the healthfulness of dwelling rooms.

Dr. Anders then gave some of his own experiences with regard to florists and gardeners. He had taken great pains to gather evidence of the general health and longevity of persons engaged in these occupations. He found that although among florists and gardeners there was a slight tendency to rheumatism, there was undoubted evidence to show that floriculture arrested consumption.

The lecturer gave several instances of this, mentioning one case in particular in which the individual came of a consumptive family, and yet reached the age of 50 years without any symptoms of the disease. At that age he left the business of a florist, and in a very short time the disease developed itself. One most important point which is so much overlooked, continued Dr. Anders, is that a moist, warm air is beneficial to all pulmonary complaints. A dry, artificial heat is decidedly detrimental to all persons with a tendency to consumption. Diseases of the larynx are also accelerated by dry, artificial heat. Under these circumstances the fact that plants give off moisture and also a certain percentage of ozone, is sufficient to show that they are of a decided sanitary value. Ozone purifies the atmosphere by oxidizing all the vitiated organisms floating in it.

Dr. Anders then went on to explain the results obtained from experiments with different plants, which showed that flowering plants were more beneficial than those that did not flower.

Dr. Anders then spoke of the custom of sending consumptives off to another climate, the fatigue of travel being often far from beneficial, whereas the cultivation of plants in the patient's own rooms, provided that it was begun in time, would in many cases arrest the disease. The patient must attend to the plants personally, so as to get the full benefit of the exhilarations arising from them.

Floriculture was a most pleasing occupation to him who once became accustomed to it, and should be cultivated in doors and out. It elevated the mind, improved the intellect and softened the manners. In conclusion, Dr. Anders hoped the time was not far distant when the house culture of plants would be far more general than it is.

A hearty vote of thanks to the lecturer for his valuable paper closed the meeting.



**TRY DREYER'S GARDEN SEEDS**  
Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free.  
**HENRY A. DREYER,**  
Philadelphia

**PAPER SEED BAGS,**  
For Flower and Vegetable Seeds.  
**CLARK BROTHERS, Manufacturers,** 61 Ann St., N. Y.

**DAKOTA WOOD MOSS**  
A New Moss, manufactured from wood; of a BEAUTIFUL DARK GREEN SHADE.  
Splendid for Florists' use for  
**WINDOW DECORATION, GARLANDS, ETC.**  
CHEAP AND LASTING.  
Send for sample and prices to  
**DAKOTA WOOD MOSS CO.,**  
552 W. Madison St., CHICAGO.

## DUTCH BULBS.

Our Wholesale Catalogue is ready, and will be mailed free on application.

**GT. VAN WAVEREN & KRUYFF,**  
FLORISTS,  
SASSENHEIM, near Haarlem, HOLLAND.  
No Agents. Wholesale Only.



### Florist's Letters.

PATENT APPLIED FOR.  
These letters are made of the best immortelles, wired on wood or metal frames with holes to insert toothpicks.

Prices on Wood Frames:  
2-in. purple, ... per 100, \$3.00  
2½-in. " " " " " 4.00  
Send for sample. Postage 10c. per 100. Script lettering on Metal Frames any word, 8c. per letter.

Designs, Monograms, Etc.  
**W. C. KRICK,**  
1107 Broadway, Brooklyn,  
N. Y.  
**M. M. Bayersdorfer & Co.,**  
Phila., Agts. for Penna.  
**J. C. YAGGER,** Chicago,  
Act west of Pennsylvania

## THE ILLUSTRATED Dictionary of Gardening

*A Practical and Scientific Encyclopædia of Horticulture for Gardeners and Florists.*

EDITED BY **GEO. NICHOLSON,**  
of the Royal Botanic Gardens, Kew, England.

A most valuable work of reference for florists and all interested in horticulture.

PRICE, for the set of seven handsomely bound volumes, \$21.00.

**JAMES A. PENMAN,**  
12 Dey Street, NEW YORK.  
Sole Agent for the United States and Canada.

Orders may also be addressed to the

**AMERICAN FLORIST CO.,**  
54 La Salle Street, CHICAGO

## THE EVANS CHALLENGE VENTILATING APPARATUS.

WITHOUT A RIVAL EITHER IN COST OR EFFICIENCY OR IN SECURITY IN CASE OF STORMS.



— MANUFACTURED BY —  
**QUAKER CITY MACHINE CO.,**  
1100 and 1110 North E Street,  
RICHMOND, IND.

WHEN WRITING FOR ESTIMATES, PLEASE GIVE FOLLOWING DIMENSIONS:

- 1st. Give the number of sashes to be lifted.
- 2nd. Give the length and depth of sashes, (depth is down the roof).
- 3rd. Give the length of house.
- 4th. Give the height from the ground to the comb of roof.
- 5th. Give the thickness and width of rafters or sash bar.

**JOHN CURWEN, Jr.,**  
GREENHOUSE STOCK AND ROSES.  
Villa Nova P. O., Delaware Co., Pa.  
Money Order Office: Bryn Mawr, Pa.

2,000,000

## CABBAGE PLANTS NOW READY.

All orders filled promptly at any distance.

**WE PACK LIGHT.**

All leading varieties, \$2.00 per thousand, 2,000 or more, at \$1.50 per thousand.

Special prices on large quantities and to dealers.

## TOMATO PLANTS

Now Ready, at \$1.00 per hundred.

## CELERY PLANTS July 1st.

Send for list FREE.

## G. R. CLARK & CO.

SEEDSMEN, FLORISTS AND NURSERYMEN,  
SCRANTON, PA.  
Mention American Florist.

## DUTCH BULBS.

**E. WILTERDINK,** 116 Pearl St., NEW YORK,

SOLE AGENT FOR

**MR. E. KRUYFF,** Bulb Grower, Sassenheim, near Haarlem, Holland,

ESTABLISHED 1810.

Is now ready to book orders, give estimates, quote special prices and forward Wholesale Catalogue on application.

A New Discovery, Very Important to Florists for Cut Flower Trade.

Dutch hyacinths producing spikes not larger than Romans, but having the advantage of color and better form, which have been recently introduced in Europe with marked success, have not till now been brought before the American gardeners and florists. These small Hyacinths in all colors can be had in bloom earlier than large Hyacinths, it being the intention to use them for cutting.

Mr. Kruyff's long experience in bulb growing enables him after a thorough test last year with these Hyacinths, to say that from January these small Hyacinths, producing flowers of the size of Romans, are even more suitable to the above trade and a great deal less expensive, while the many different and beautiful colors found among the Dutch Hyacinths speak in their favor. Trial orders for these Hyacinths early solicited in order to secure the quantities desired. Varieties might be left with me for best selections, or will correspond with any so desiring.

## THE AMERICAN FLORIST COMPANY'S

# : : DIRECTORY : :

OF

## FLORISTS, NURSERYMEN AND SEEDSMEN

OF THE

UNITED STATES AND CANADA.

1887.

**PRICE ONE DOLLAR.**

The most complete and accurate list yet published. The key designates the particular branch of the trade each one is engaged in. The street and number of those living in cities will insure the delivery of tons of catalogues which have hitherto remained dead in the office to which they were addressed. At this low price every one in the trade can afford to have a copy for reference. Address

**AMERICAN FLORIST CO.**

54 LA SALLE ST., CHICAGO.



## Cleveland.

Bulbs have been quite plentiful and of good quality the past season.

Arthur Jaynes has withdrawn from the florist's business and removed to Chicago to make a venture in another line. Mrs. Jaynes and his brother Harry continue at the old stand.

W. Beaumont has moved a little further up the street to a new stand which is an improvement on the old one.

Mr. Gordon Gray has the sympathy of his fellow craftsmen in the recent death of his son, a very promising young man.

Miss May Grant, formerly secretary of the local club was married to Mr. Eugene Foster, April 25.

One of the florists here is puzzled over the cause of a lot of blue Roman hyacinths bearing a first crop of pure white flowers. The seconds from same bulbs came true to color. C.

COAL TAR AS A PRESERVATIVE.—I have noticed in your columns from time to time mention of different materials for preserving wood in greenhouse benches, but have never noticed coal tar mentioned. I have tried it and don't want any better. If it gets too thick to spread freely mix it with an equal quantity of kerosene oil. J. M.

## EXTRA BULBS

—OF—

Freesia Refracta Alba Odorata  
NOW READY.

EXTRA SIZE, largest ever offered.....	Per 100 \$ 4.00
No. 1 BULBS, large size.....	2.50
No. 2 BULBS, good size.....	1.50

For Delivery in September.

ROMAN HYACINTHS,  
DUTCH HYACINTHS,  
LILIAM CANDIDUM,  
LILIAM HARRISII,  
LILIAM LONGIFLORUM,  
PAPER WHITE NARCISSUS.

And all Bulbs used by Florists at proper season.

Send for Wholesale Price List ready in September.

SCHLEGEL & FOTTLER,  
BOSTON, MASS.

Mention American Florist.

## DUTCH BULBS!

G. V. VAN ZANTEN & CO.,  
WHOLESALE BULB GROWERS,  
Hillegom, Haarlem, Holland.

ESTABLISHED 1862.

Our stocks are selected with the greatest care for the American trade.

Price list free on application—before ordering write for one.

HULSEBOSCH BROS.,  
Dutch Bulb and Plant Growers,  
OVERVEEN, in HAARLEM, HOLLAND,  
SUPPLY THE TRADE.

Address for the United States: P. O. Box 3118 New York City. Wholesale Catalogue on application.

## FRESH BOUQUET GREEN

—NOW ON HAND.—

Per Barrel, \$2.00; Per Hundred Pounds, \$5.50.

SPECIAL RATES FOR LARGE QUANTITIES.

WE HAVE A FULL LINE OF  
WICKER NESTS, MOSS BASKETS,  
BOUQUET PAPERS,

And all Florists' Supplies. Let us have your Bulb orders.

J. C. VAUGHAN, 146 & 148  
W. WASHINGTON STREET, CHICAGO.

## TO THE JOBBING TRADE.

I HEREBY INFORM THE TRADE THAT

Mr. H. A. DAACKE, 22 Dey Street NEW YORK,

Is my sole Agent for the United States and Canada for the sale of my own grown

## DUTCH BULBS,

Of whom Catalogues may be had upon application.

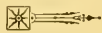
B. J. LOMANS,

\* \* \* \* \* Haarlem, Holland.

WE ARE NOW BOOKING ORDERS FOR  
HYACINTHS, TULIPS, Single and Double NARCISSUS, Etc.  
SEEDSMEN AND FLORISTS

Importing direct should write us for prices. Special rates to large buyers. Largest stock of

Hyacinths, Tulips, Polyanthus, Single and Double Narcissus, Narcissus Bicolor  
Horsfieldi, Poets Ornatus, Trumpet Major, Double Von Sion.



R. VAN DER SCHOOT & SON.

Bulb Growers,

HILLEGOM, near Haarlem, HOLLAND.



TRADE MARK.

POLMAN MOOY,

WHOLESALE GROWERS OF

DUTCH BULBS.

HAARLEM,  
HOLLAND.

SEE OUR GENERAL LIST FOR NOVELTIES AND SPECIALTIES.  
HEADQUARTERS FOR FORCING BULBS.

ESTABLISHED IN 1810.

PRICES LOW.  
DUTCH BULBS, ROMAN HYACINTHS,

Lilium Candidum and Harrisii, Freesias, Paper White Narcissus, etc.

From the BOSKOOP HOLLAND NURSERY ASSOCIATION, HARDY LOW BUDDED DWARF  
ROSES, TREE ROSES, RHODODENDRONS, Azaleas, Lilacs, Hydrangeas;

EXTRA STRONG CLEMATIS, ETC., ETC.

Catalogues for Fall Importation now ready.

ADDRESS:

C. H. JOOSTEN, Importer,

3 Coenties Slip, NEW YORK.

WE ARE LARGE  
BULBS IMPORTERS OF FORCING BULBS.  
SEND YOUR LIST FOR PRICES.  
CURRIE BROS., SEEDSMEN AND FLORISTS,  
MILWAUKEE, WIS.

**AUGUST RÖLKER & SONS,**

44 Dey St., NEW YORK,

Supply the Trade with

**SEEDS, BULBS,**

And all kinds of

**FLORISTS' SUPPLIES.**

Revised Price List mailed on application.

**BULBS, IMMORTELLES,****J. A. DE VEER,**

(Formerly of DeVeer &amp; Boomkamp.)

19 Broadway, New York.

SOLE AGENT FOR

THE GENERAL BULB CO., Vogelenzang, (Holland.)

Ls. BREMOND FILS, Ollioules, (France.)

Offers to the trade, net without engagement, for prompt or spring delivery.

Lilium Auratum, large bulbs.....	\$1.00	\$80.00
Excelsior Pearl Tuberoses, extra.....	1.75	15.00
Gladioli, large bulbs, fine mixed.....	1.50	12.00
"    "    Brenchleyensis.....	.90	7.50
"    "    scarlet & crimson.....	1.00	9.00
"    "    pink & variegated.....	1.75	15.00
"    "    white and light.....	2.25	20.00
"    "    yellow and yellow		

grounds.....	2.50	22.50
Hyacinthus Candicans, large.....	2.50	20.00

Dahlias in fine sorts, undivided roots.....	15.00	2.25
"    in separate colors.....	12.00	1.75
"    in fine mixture.....	9.00	1.25
Cannas.....	5.00	.75
"    in fine named sorts.....	7.50	1.20
Caladium Esculentum, large bulbs.....	12.00	1.75
CLEMATIS JACKMANI and other		
sorts, Dutch grown, 2 to 3 years		
old, strong roots.....	35.00	4.50

## QUOTATIONS ON ROMANS.

PAPER WHITE NARCISSUS.

LILIUM CANDIDUM, ETC.

NEW CROP, GIVEN ON APPLICATION.

Have Removed to 133 Water St.

**Summer Flowering  
BULBS.**

Amaryllis Formosissima.....	Per 100
Caladium Esculentum.....	\$15.00
Cooperia Pedunculata.....	6.00

## —GLADIOLUS—

## CHOICE NAMED VARIETIES.

Our Selection.....	10.00
Very good Standard named varieties.....	6.00
Mixed Reds and Scarlets.....	1.50
"    Pink and variegated.....	2.00
"    Whites and light shades.....	3.00
"    Yellows.....	4.00
New American Hybrids mixed.....	2.00
Good mixed, all shades.....	1.50

## HYACINTHUS CANDICANS,

\$5.00 per hundred.

## RICHARDIA (SPOTTED CALLA),

\$6.00 per hundred;

Extra strong, \$10.00 per hundred

**MICHEL PLANT AND SEED CO.**

718 Olive Street,

ST. LOUIS, MO.

Mention American Florist.

**OUR WHOLESALE CATALOGUE**

— OF —

**BULBS**

Of all Sorts,

**CHRYSANTHEMUMS, &c.**

Is now ready. Will be sent to all applying that we know to be engaged in the trade—or to any furnishing us evidence, as cards, letter-heads or bill-heads.

**V. H. HALLOCK & SON,  
QUEENS, NEW YORK.****F. E. McALLISTER,**

— WHOLESALE DEALER IN —

Seeds For the Florist Requisites For the Green-  
Market, Garden- house or Gar-  
er and Farmer. den.  
Such as Baskets, Im-  
mortelles, Grasses,  
Mosses, Boquet Pa-  
pers, Pampas  
Plumes, etc

22 Dey Street, - - - NEW YORK.

**SEGERS BROTHERS,  
GROWERS OF  
HOLLAND BULBS.**

OUR SPECIALTIES ARE:

Holland Hyacinths and Tulips, in any quantity; also Crocuses,  
Narcissus, Daffodils, Liliiums, Lily of the Valley, Gladiolus  
The Bride, Anemones, Ranunculus, Spiraea Japonica, etc.

References as to quality of our Bulbs, etc., to several United States Florists  
and Seedsmen.

Our Wholesale Catalogue is now Published.

PLEASE DO NOT DELAY TO SEND YOUR ORDER.

**LISSE. NEAR HAARLEM, HOLLAND.**

WHOLESALE ONLY.

NO AGENTS.

**BASKETS, BOUQUET PAPERS.**

Send for special list for School Commencements.

**FALL BULBS.**

ORDERS TAKEN NOW FOR ROMAN HYACINTHS, LILY CANDIDUM, LILY HARRISII, AND ALL FORCING BULBS.

ALSO FOR THE FULL LINE OF DUTCH BULBS.

**JAMES KING,**

170 Lake St. CHICAGO.

**DUTCH HYACINTHS.**

Our Wholesale Catalogue for the coming season of

**DUTCH HYACINTHS, TULIPS, NARCISSUS,  
AND ALL OTHER BULBS AND BULBOUS ROOTS**

Is now ready. Don't forget to forward a postal card if you want one, as there is a great reduction in prices of

Hyacinths, Narcissus, Gladiolus, and other worth-growing Bulbs and Roots.

**SEGERS & CO.,  
BULB GROWERS,**

LISSE, near HAARLEM, (Holland.)



## Rosebuds and Bad Words.

The experience of Florist Scallen in collecting a small bill from Rose Coghan, the actress, as related by the New York Journal was quite lurid. We give the account herewith:

Mr. Scallen had a small bill of \$9.50 against Miss Coghlan, and in the usual course of his business had sent his boy with it. Each time the boy came he told Mr. Scallen that Miss Coghlan was asleep and couldn't be disturbed.

On Friday, things had not gone particularly well with Mr. Scallen, and so when the boy came back with the bill, he gave the proprietor of the floral establishment began to wonder if she was ever awake and determined himself to go to the Sloan Flats and find out. So up stairs he went, rang the bell and was met by an exceedingly pretty and stylish little maid.

"Is Miss Coghlan in?" asked Mr. Scallen.

"Yes, she's in," answered the maid, "but asleep and left orders that she should not be disturbed."

"Is she ever awake?" asked Mr. Scallen.

"Sometimes," answered the maid, "but not often."

"Well," said Mr. Scallen, "it's not a particularly busy day with me, and I guess I'll wait till she wakes up."

Mr. Scallen put his back against the jamb of the door and assumed a position which evidently impressed the maid with his intention of remaining on guard. This disturbed her serenity and she said:

"Very well, I'll go and tell Miss Coghlan."

"I wish you would," said Mr. Scallen.

Mr. Scallen says that he heard a whispered consultation from the end of the small flat and saw a sudden burst of anger from a voice that he had often admired on the stage.

"Then," adds Mr. Scallen, "I saw Miss Coghlan sailing down the passageway, looking just as she did in the old act of 'third of May.' Only her clothes weren't so fine, and exclaiming, 'Who is this impudent puppy who dares disturb my rest?'"

"When she got up to me I told her I was the man, and that all I came for was a little bill of \$9.50, and that I'd difficulty in getting, from the fact that she was always asleep."

"I call this downright impudence," said Miss Coghlan, "and you shan't have a single penny of it."

"I was half in the passageway outside and half inside when Miss Coghlan said this, and at the same time gave the door a vigorous kick. It would have hit me square on the nose if I hadn't put my foot out, which of course sent it back against her. Then she said I had insulted her, that her husband was a lawyer and would soon teach me to come to respectable people's dwellings and create a disturbance. I told her I had no desire whatever to create any disturbance at all, and that the worst I had seen her was perfectly satisfied and would make her a present of the money. I told her the loss of \$9.50 wouldn't break me, and then left. That evening, when I was arranging some flowers in the shop, Mr. Scallen called on the arm of her husband, pointing at me. They went away. I suppose he took her to the theater, and then he came back, walked into the shop and asked me if it was that had called on his wife that day and insulted and assaulted her."

Mr. Scallen said that he was the man, and Mr. Edgerly then launched into a torrent of vituperation, winding up with the comforting assurance that he would "lick Mr. Scallen for so moderate a sum as two cents." Mr. Scallen is said to have told Mr. Edgerly that he was perfectly satisfied the offer. But after a while he jumped over his counter, as Mr. Edgerly's conversation grew louder and more intense, and said that small as he was, he thought he could "kick" Mr. Edgerly. Then Mr. Edgerly thought it over and concluded after a little while that he would not chew Mr. Scallen up. He went to the door, muttered several more adjectives and departed.

This, it seems, was the whole underlying trouble of Miss Coghlan's remark that she wouldn't accept her part in "The Abbe Constantin," for when Mr. Edgerly returned to her and reported that he had not licked Mr. Scallen she made a momentary demonstration that appeared to convince Mr. Edgerly that he, the only one in reality who knew nothing about the quarrel, was really the one who was about to be licked. At any rate, loud words were heard, Mr. Edgerly made a precipitate exit from his wife's dressing-room, and went up to Mr. Scallen's establishment and planked down \$9.50.

## SPLENDID OFFER.

Roses, Teas, in 2-inch pots, forcing kinds.....	Per 100 \$3.00
Hybrids, in 2½-inch pots.....	5.00
Fuchsias, 2-inch pots, new varieties.....	5.00
Coleus, 2-inch pots, new varieties.....	2.00
Carnations, "Hime" White, in flats.....	3.00
Violes, ast., 2-inch pots.....	3.00

Flowering Plants in Bloom and Bud.  
Geraniums, Fuchsias, Roses, Heliotropes, Feverfew, Begonias, etc. 2-inch pots, \$1.50 per doz.

A. GIDDINGS, DANVILLE, ILL.

## CHINESE PRIMROSE SEED.

## FRESH AND RELIABLE.

PRICES:

Per packet..... \$ .20  
Six packets for..... 1.00  
Fourteen packets for..... 2.00

## ORDER BY NUMBERS.

## SINGLE FLOWERING.

No.		Seeds
1.	White; not less than.....	50
2.	Dark red.....	50
3.	Orange.....	50
4.	Dark crimson, spotted white.....	50
5.	Bright lilac, spotted white.....	50
6.	White, striped and flaked with red.....	50
7.	White, striped red, large yellow center.....	50
8.	Cheswick red; very dark.....	50
9.	White, blotched pink.....	25
10.	Pink leaved; three colors mixed.....	15
11.	Crested leaved; flowers white and pink.....	50
12.	Miscellaneous mixed, best.....	50

## DOUBLE FLOWING.

13.	Orange.....	15
14.	Pure White.....	15
15.	Eighteen varieties mixed, 500 seeds price, \$1.00	

Address orders to

HENRY S. RUPP & SONS, Shiremanslow, Pa.

## FOR SALE BY

JOHN B. FABER,

KANKAKEE, ILL.

5,000 Strong Plants of Saxifraga from 2½ and 3-inch pots at \$2.00 per 100, or \$15.00 per 1,000.

**VERBENAS.** Fine healthy plants in best var. pots, \$3.00 per 100. In bud and flower from 2½ in. pots. 100 best Chrysanthemums, \$5.00. 100 best Roses, Geraniums, Coleus, Alternanthera, Santolins and other saleable plants in great variety.

W. T. HILL, Florist, Franklin, Pa.

## VERBENAS A SPECIALTY.

Fine Stock in bloom and bud. Free from all disease.

From pots.....	per 100 per 1000
Coleus from pots.....	2.50 20.00
Pansy, in bloom and bud.....	2.00 15.00

## WM. DESMOND,

Henry Co. KEWANEE, ILL.

100,000

## VERBENAS.

THE CHOICEST OLD AND NEW VARIETIES.

Per 100 per 1000  
Fine pot plants in bud and bloom..... \$2.50 \$20.00

— NO RUST OR MILDEW. —

✓ Packed light, and Satisfaction Guaranteed.

J. L. DILLON, Bloomsburg, Pa.

## ROEMER'S SUPERB PRIZE PANSIES.

"The Finest Strain of Pansies in the World."  
Introducer and Grower of all the leading Novelties.

Catalogue free on application.

FRED. ROEMER, SEED GROWER.

QUEDLINBURG, GERMANY.

## FOR SALE.

150 ORANGE TREES,

Twenty-four inches high. Will bear this Fall. Well established in 5-in. pots. Some in bloom now.

LA ROCHE & STAHL,

COLLINGDALE NURSERY, Delaware Co., Pa.  
or, 1237 Chestnut St., PHILADELPHIA.

THE BEST AND CHEAPEST  
DOUBLE PETUNIA SEED

(P. hybrida grandiflora fl. pl.)

In the market. For sale to the trade by the grower.

G. A. McTAVISH,

NORTH SAANICH, B. C., CANADA.

Mention American Florist.

HIGLEY'S TRADE LIST OF  
SEEDS, PLANTS, BULBS

AND FLORISTS' REQUISITES

Now out. If you do not receive one, send for it. Address

HENRY G. HIGLEY,  
CEDAR RAPIDS, IA.

## FORCING BULBS

FOR

Fall Delivery.

## NARCISSUS

AND OTHER

## FORCING BULBS

For Fall Delivery

All Good Flowering Bulbs.

OF NARCISSUS I SHALL HAVE ABOUT  
TWO MILLIONS READY FOR  
FALL DELIVERY.

Narcissus Albicans, the best of the single white trumpets, 45¢ per 100.

Narcissus Bicolor Empress, the queen of the bicolor daffodils, enormous flowers, 90¢ per 100.  
Narcissus Bicolor Grandis, similar in color to Horsfieldi, but having larger flowers and blooming later, 65¢ per 100.

Narcissus Bicolor Horsfieldi, one of the largest and best for cutting, 65¢ per 100.

Narcissus Bulbocodium, the Hoop Petticoat daffodil; very fine, strong bulbs; 65¢ per 100.

Narcissus Golden Spur, very large deep yellow flowers and early blooming; one of the best; 45¢ per 100.

Narcissus Bulbocodium Citrinus, like the yellow Hoop Petticoat, but with pale sulphur-yellow flowers, 75¢ per 100; 65¢ per 1000.

Narcissus Golden Spur, very large deep yellow flowers and early blooming; one of the best; 45¢ per 100.

Narcissus Henry Irving, one of the best deep golden yellow trumpets, 60¢ per 100.

Narcissus Incomparabilis Cynosura, a beautiful single incomparabilis for cutting, yellow cup, divisions creamy white, 85¢ per 100; 70¢ per 1000.

Narcissus Incomparabilis Stella, large single white variety, very early, fine for cutting, 85¢ per 100; 70¢ per 1000.

Narcissus Major, true, one of the best forcing sorts, large yellow trumpet, similar to maximum, 95¢ per 100; 80¢ per 1000.

Narcissus Nobilis, a first-class variety for florists, free and early, 75¢ per 100; 60¢ per 1000.

Narcissus Obvallaris, the true Tenley daffodil, one of the best varieties, forcing deep rich yellow flowers of great substance, 85¢ per 100; 70¢ per 1000.

Narcissus Odorus Camparnelle, the well-known Camparnelle jonquil, very strong bulbs, 55¢ per 100; 45¢ per 1000.

Narcissus Orange Phoenix, large double white flowers with orange center, good for cutting, 65¢ per 100; 50¢ per 1000.

Narcissus Pallidus Praecox, the earliest of all; forces very freely; single sulphur-colored trumpets, 75¢ per 100; 60¢ per 1000.

Narcissus Poeticus Ornatus, the early white poet's Narcissus, the best of the Poeticus section for forcing and for cutting, 85¢ per 100; 70¢ per 1000.

Narcissus Poeticus Plenus, the double white Narcissus, 45¢ per 100; 30¢ per 1000.

Narcissus Principes, one of the best forcing sorts; soft pale yellow trumpets, 95¢ per 100; 80¢ per 1000.

Narcissus Rugilobus, true, large yellow trumpet, very free and very early, 145¢ per 100; 120¢ per 1000.

Narcissus Scoticus, the Scotch Garland daffodil, a beautiful variety both for borders and for forcing, 65¢ per 100; 40¢ per 1000.

Narcissus Von Sion, true, the double deep yellow daffodil, 55¢ per 100; 40¢ per 1000.

And many other first-class sorts. List of varieties and prices I should be happy to furnish on application.

Anemone Fulgens, true, fine strong English grown tubers, 75¢ per 100; 60¢ per 1000.

Chionodoxa Lucilia, true, beautiful blue flowers in early spring, 25¢ per 100.

Freesia Reliance Alba, one of the best modern plants for forcing, pure white, sweetly scented flowers, 75¢ per 100; 65¢ per 1000.

## THOS. S. WARE,

HALE FARM NURSERIES,

Tottenham, London, England.

# A Grand Winter Flowering Tea Rose.

## ORIGIN UNKNOWN. CALLED BY US "THE GEM."

A Special Prize was awarded this Rose for being a Rose of special value, and worthy of merit, at the Penn. Hort. Society's spring show, April, '88.

It is a Rose larger in size than the Perle des Jardins, fragrant, of good habit, a vigorous grower, and a very free bloomer. The color is creamy white, shading richer towards the center; the outer petals are occasionally tinged with pink.

We have tested this Rose thoroughly the past two winters, and have no hesitation in recommending it as a Rose that florists can grow with satisfaction and **PROFIT**.

Good judges who have seen this Rose growing pronounce it First-Class.

### READ WHAT IS SAID ABOUT THIS ROSE BY MEN WHO HAVE SEEN IT:

*Dear Sir:*—After having seen your Rose growing, I would say it is a Rose in size about like Mermet or Bride, and being a strong grower and free bloomer, that it will prove quite an addition as a florist's rose.

Yours truly,

PHILADELPHIA, March 17, 1888.

JOHN WESCOTT, of PENNOCK BROS.

PHILADELPHIA, March 17, 1888.

For our own use.

CRAIG & BRO.

SUMMIT, N. J., April 5, 1888.

*Dear Sir:*—Having carefully examined the Rose you have now to offer, I consider it a very fine Rose for winter cut flower work, but consider it as undecided what variety it can be.

JOHN N. MAY.

*Dear Sir:*—Having to-day seen your Rose for the first time I should consider it a first-class Rose for florists use, being rather larger than a Perle, of good, robust habit, of pale lemon color with a slight pink tinge on the outside petals; resembles Marie Van Houtte, but as seen at your place finer than I have ever seen that variety.

ERNEST ASMUS.

Strong, healthy plants in 2-inch pots, will be ready June 1, 1888, at \$25.00 per 100. Send for full descriptive circular.

## C. RAMSDEN, Agent,

P. S.—THIS IS THE ROSE WE OFFERED IN APRIL 1st ISSUE UNDER THE NAME OF "THE GEM."

MORTON, PA.

## SURPLUS STOCK.

## 25,000 MUSA ENSETE,

The Great Abyssinian Banana, Best Decorative Plant for the Lawn.

## 100,000 ROSES

PERLES, NIPHOTOS, BRIDES, CATHERINE MERMET, PURITANS, LA FRANCE, Mad. CUSIN, Etc.

## HARDY PLANTS OF ALL VARIETIES.

Prices extremely low can be had on application.

## B. A. ELLIOTT CO.,

PITTSBURG, PA.

### WESTERN FLORISTS

	I OFFER NOW	Per 100
Geraniums, Asa Gray, 4-in. in bud and bloom...	3-in. " " " "	\$ 8.00
" " " " " " " "	" " " " " " " "	4.00
" " " " " " " "	Gen. Grant, 3-in. " " " "	4.00
" " " " " " " "	Mrs. M. E. Page, 3-inch, fine double	4.00
" " " " " " " "	scarlet.	4.00
" " " " " " " "	Asa Gray, G. Mangini, Grant, Mrs.	
" " " " " " " "	Chrysanthemum, the selection.	2.00
" " " " " " " "	M. E. Page, Streak of Luck, Comt. d' Coggi,	
" " " " " " " "	2-inch.	3.00
" " " " " " " "	Heliotrope, 2-inch, 3 var.	3.00
" " " " " " " "	Smilax, 2-inch.	2.50
" " " " " " " "	Hibiscus, 2-inch, 5 var.	5.00
" " " " " " " "	Golden Feverfew, nice plants.	2.00
" " " " " " " "	Alternantheras.	3.00
" " " " " " " "	Verbenas, a fine lot, stocky plants.	2.00
" " " " " " " "	Chrysanthemum, the selection.	2.00
" " " " " " " "	Pansies.	2.00

Can supply the above plants in any quantity from five to one thousand.

Address **N. S. GRIFFITH,**  
JACKSON CO. INDEPENDENCE, MO.  
(Independence is well located for shipping, being 8 miles east of Kansas City.)

### JUNE OFFERS.

	Per 100
FUCHSIA Storm King, 2-in. pots.....	\$ 2.50
" " " 2½-in. pots, strong.....	4.00
" Phenomenal, 2½-in. pots, " .....	6.00
" Geraniums, assorted, good plants...	4.00
" " Sir Robert Napier, best	
tricolor.....	\$1.50 per dozen.
Heliotrope Mrs. D. Wood.....	4.00
Alyssum Double Tom Thumb.....	3.00
Asters, large flowering.....	2.00
Pansies, Imp. Trimardeaux, strong.....	4.00
" " Fine strain German.....	2.50

Above prices are by Express only, and for orders of not less than \$3.00.

### ELLIS BROS.,

KEENE, N. H.

### SMILAX.

#### WANTED—YOUR TRADE.

Fine young plants ready now, from No. 3 rose pots. **ORDERS BOOKED for Delivery either in July, August or September.**

Send for low prices and shipping particulars. Can send by fast freight or express.

### PANSIES.

Will have a fine assortment for planting frames in the fall or forcing. Send for particulars.

### ALBERT M. HERR,

LOCK BOX 338. LANCASTER, PA.  
Mention American Florist.





# ORCHIDS

## Cheap as Good Roses.

Send 8 two cent stamps for Catalogue and Plate.

BRACKENRIDGE & CO., GOVANDSTOWN, Md.

MANY ADDITIONS

— TO MY —

# ORCHID STOCK

this Spring. Send for Catalogue.

WM. MATHEWS,  
UTICA, N. Y.

# ORCHIDS.

Best and Largest Stock in New England to Cut.

CAPE COD PINK POND LILIES,  
AND ALL COLORS.

Send for List.

BENJ. GREY, Malden, Mass.

# Ferns, Palms, Orchids

FERNS FOR FLORISTS' PURPOSES.

BY THE HUNDRED OR THOUSAND.

GEO. WITTBOLD,  
Cor. School and Halsted Sts.,

LAKE VIEW, CHICAGO.

# CHRYSANTHEMUMS.

We have a fine stock of the new French and English varieties. There are many exceptionally fine sorts in this collection.

# \* CHRYSANTHEMUMS \*

Our stock of the new varieties of last year is large and healthy. There is no florist in the country who grows Chrysanthemums who can afford to be without them.

# CHRYSANTHEMUMS.

An exceedingly large and fine list of older varieties. Can supply 100 in 100 varieties; or by 1,000 or 10,000. PRICE VERY LOW.

Address all orders to

W. P. SIMMONS & CO.  
GENEVA, OHIO.

# CELERY PLANTS.

WHITE PLUME, PERFECTION HEARTWELL, NEW ROSE, GOLDEN HEART, GOLDEN DWARF.

\$2.00 per thousand, in any desired quantity.

SEASON BEGINS JUNE 1 AND EXTENDS TO JULY 20.

JOSEPH DUNKLEY, Celery Grower,

KALAMAZOO, MICH.

# SURPLUS TO EXCHANGE

For H. P. and Tea Roses, 2½ in. pots.

4,000 Finest Named Ranunculi; 2,000 Eulalias, var. and zeb; 500 Am. Sarineus; 500 L. Caudimund; 20,000 A. Alamasco; 400 Cooperia Drummond; 100 Iris Susiana; 100 Hemerocallis flava; 100 Arundo donax var.; 400,000 Sets Ex. Pearl Tuberoses, both extra large and medium. Address at once with offers.

MRS. J. S. R. THOMSON, Spartanburg, S. C.

# CHARLES J. POWERS,

FLORIST

SOUTH FRAMINGHAM, MASS.

GREENHOUSE, BEDDING AND MISCELLANEOUS PLANTS.

Flowers and Floral Decorations;

For Parties, Weddings and Funerals, furnished and arranged to order.

# KALAMAZOO CELERY PLANTS

Ready June 1st at \$2.00 per 1000 for any of the leading varieties; large lots very cheap. Celery Culture complete 50 cts., given with all orders of 500 plants or over. G. BOCHOVE & BRO., Kalamazoo, Mich.

# ORCHIDS AND PALMS.

NEW AND RARE PLANTS.

New Catalogue ready May 1st.

# RARE OFFERS:

- 6 Fine Orchid Plants, established and growing, all different, at \$10.00.
- 12 " " " twelve distinct sorts . . . . . 20.00.
- Single plants of the Collection . . . . . 2.50.
- 6 Palms, best varieties, fine plants . . . . . 5.00.
- 12 " " and other choice foliage plants . . . . . 10.00.

A PREMIUM WILL BE SENT WITH EVERY ORDER OF \$10.00 AND OVER.

# SIEBRECHT & WADLEY,

Largest Collection of Orchids and Palms in America.

409 Fifth Ave., NEW YORK.

YOU CAN'T get better printing anywhere than I send you, and there are few places where as much practical knowledge of plants, bulbs, seeds and trees is stirred in with the printing. The mixture gives accurate, intelligent work in my specialty, which is printing for nurserymen, florists and seedsmen. Try me for anything you need. Good catalogues assured; lots of handsome cuts here.

J. HORACE MCFARLAND, Harrisburg, Pa.

Contracts made now for Fall Delivery 1888

Japanese Lily Bulbs



California Lily Bulbs

Japanese Seeds.

Conifers, Palms

Trees, Shrubs.

and Bamboos.

H. H. BERGER & CO., 315 & 317 Washington Street,  
SAN FRANCISCO, CALIFORNIA.  
Send for Estimates. Established 1878.

# PLANTS, SEEDS AND BULBS

# FINK & CO.

Postoffice Box 484,

# City of Mexico.

Mention American Florist.

# CALIFORNIA BULBS.

I will supply the trade with native California

EXTRA BULBS.

PARDALINUM LILIES, COLOCHORTUS

AND BRODIEA A SPECIALTY.

Prices on application.

S. WILSON,

DUNLAP, Fresno Co., CALIFORNIA.

# SPECIAL LOW PRICES FOR JUNE

ROSES—	Per 100	Per 1000
Malmalson, Sombriek, Bride, Mad. Alex. Bernaux, Mermet, Safrano, Bon Silene, White Bon Silene, La Pictole, Mad. Camille, Compt. de La Barth and fifty other good varieties. . . . .	\$ 4.00	\$30.00
Geraniums, in 20 varieties. . . . .	2.00	
P. Bismarck, Holly Wreath, L'Elegante, Mad. Salvo, Mt. of Snow. . . . .	2.00	
Rose Ger. Stripland Pot. Mrs. Taylor. . . . .	2.00	
Heliotrope, 3 varieties. . . . .	2.00	
Fuchsia and Lantana. . . . .	2.00	
Carnations, Sunrise, De Graw, Hinz's White, Petunia and Hinsdale. . . . .	2.00	
Alternanthera 3 var. . . . .	2.00	18 00
Chrysanthemums, 50 good varieties. . . . .	2.00	18 00
Coleus in variety. . . . .	2.00	18 00
Violes, blooming var. . . . .	2.00	18 00
Passifloras, Constance Elliott, Floridii Smith, Tristacola. . . . .	2.00	
Double White Primroses. . . . .	15 00	
Bouvardia Lelantha, Flavescens. . . . .	5 00	
Honeysuckles, Halleant. . . . .	2 00	
Abutilons. . . . .	2 00	
Hydrangea Thos. Heg. . . . .	4 00	
Fine stock of young Dahlias. . . . .	3 00	
Begonia Rubra. . . . .	5 00	
Euboea and New Gig. Roses. 1 per doz. . . . .	1 00	

List now ready and will be mailed on application.

Address **GEO. THOMPSON & SONS,**  
LOUISVILLE, KY.  
Mention American Florist.

# FOR SALE.

30,000 FREESIA REFRACTA ALBA BULBS, and a limited quantity FREESIA LEICHTLINII MAJOR

at \$22.50 per 1,000, delivered first week in July. A discount will be given on lots of 5,000.

Young Roses will be partly taken in exchange, if sorts suit. Address

**S. EDWARDS & SON,**

BRIDGEOTON, Camb. Co., N. J.

FOR SALE. FALL DELIVERY.

50,000

# AZALEA INDICA and CAMELLIAS.

For Catalogues, address

**C. H. JOOSTEN,**  
Importer of Bulbs and Plants.

3 Coenties Slip, NEW YORK.

ENGRAVER FOR FLORISTS,  
PHILADELPHIA.

# FOR FLORISTS.

	Per 100
Coleus, 20 varieties. . . . .	\$ 4.00
Geraniums, 4-inch pots, in bud. . . . .	10.00
2-inch pots. . . . .	5.00
Roses, 4-inch pots, fine. . . . .	12.00
2-inch pots. . . . .	5.00
Achyranthes, 2-inch pots, 6 varieties. . . . .	4.00
Chrysanthemums, 2-inch pots, 60 var. . . . .	5.00
Verbena, 2-inch pots, 12 var. . . . .	5.00
Labellia, 2-inch pots. . . . .	4.00
Golden Feverfew, 2-inch pots. . . . .	4.00
Violets, Maria Louise, 2-inch pots. . . . .	4.00
Carnations, 2-inch pots, 6 var., strong. . . . .	4.00
Single Petunias, 2½-inch pots, good var. . . . .	4.00
Echeverias in boxes. . . . .	5.00
Heliotrope, 2-inch pots, 8 var. . . . .	4.00
Miniature, 4-inch pots, in bloom. . . . .	10.00

The above stock in fine, healthy condition, and can be used for immediate sales. Any number of plants may be taken at above quotations, providing you take nothing less than one dozen.

# GEO. W. MILLER,

WRIGHT'S GROVE, CHICAGO.

Mention American Florist

# FOR SALE.

# APPLE GERANIUM SEED.

Per 100, 40c; 1,000, \$3.00; 10,000 \$25.00.

Seeds put up in packets of 100 each, and will be ready for delivery June 15, 1888. Cash with order.

**BROTHERS' INDUSTRIAL GARDENS,**  
MOBILE, ALA.

Catalogue of choice of plants, flowers, designs, etc., with 81 and 88 supplements, 50 cts., with the vegetable, 30 cents, which deduct from first order. Electricity of this Cut, \$1.50.





## New York.

John Thorpe has been sending the past week Snow Ball cauliflowers to market. The cauliflowers are very tender and delicious eating and have brought fancy prices in Broadway fruit shops. The seed was planted February 1, and sheep manure was used as a fertilizer.

Siebrecht & Wadley made an elegant dinner decoration of orchids for Robert Hoe, Esq., last week. The table was laid out in the new style of irregular ornamentation, each flower vase and glass boat being set at an angle.

Coaching parties are now very fashionable. Quantities of flowers are ordered for these entertainments.

In every locality in this city a different retail price is charged for flowers. Prices asked by the modest dealer offend the florists in fashionable localities, and the prices asked by the fashionable florists disgust the dealers on side avenues. The amiable feeling existing between New York florists is something to meditate upon.

P. L. Bogert furnished 800 blooming plants for Calvary Baptist Church Whit Sunday.

Fred Donohoe has a handsome store at 940 Sixth avenue.

The fine estate of Mrs. John Green of Staten Island, so long under the superintendence of Mr. Samuel Henshaw, is being cut up and sold in building lots.

F. A. B.

## A Cemetery Bouquet.

A lady recently sent me the following order: "Please make me a bouquet, suitable to place on a grave in cemetery, for five cents. Please put in a few rose-buds." A. C.

## SYRACUSE POTTERY CO.

Sells Flower Pots by the crate only, and ships all over the U. S. Try a crate. Samples in first crate.

PRICES PER CRATE, CASH WITH ORDER:  
 3,150 Thumbs, \$5.00; 875 3 1/2-inch, \$5.50;  
 2,625 2 1/2-inch, 8.00; 400 4-inch, 4.75;  
 1,875 2 1/2-inch, 7.25; 300 4 1/2-inch, 3.50;  
 1,500 special 5-in., 5.00; 325 5-inch, 4.40;  
 1,150 3-inch, 5.50; 100 6-inch, 3.50;

A crate weighs 400 lbs. and goes at buyer's risk and freight. Send for list, rates and prices of 17 ready packed crates, and of mixed crates picked to order. We ship same day cash comes. Send P. O. order to

J. N. PERKINS, Manager, Syracuse, N. Y.

## D. C. SCHOFIELD,

— MANUFACTURER OF —

## Improved \* Greenhouse

## \* FLOWER POTS \*

NEW BRIGHTON, PA.,

Offers to the Trade the BEST

Quality of Improved Shoulder Pot  
in the market at the

LOWEST PRICES EVER OFFERED.

SEND FOR PRICE LIST.

Orders will receive prompt and careful attention and satisfaction is warranted in every respect.

## HAND TURNED EARTHEN WARE

Price List for 1888.

2 1/2-inch.... per 100, \$ 5.50	8-inch.... per 100, \$ 5.50
3-inch.... " 5.50	9-inch.... " 6.75
3 1/2-inch.... " 5.50	10-inch.... " 8.00
4-inch.... " 5.50	12-inch.... " 23.50
4 1/2-inch.... " 5.50	14-inch.... " 50.00
5-inch.... " 5.50	16-inch.... " 100.00

No charges for package or cartage. Send \$1.00 for sample barrel before purchasing elsewhere. All barrels will find it to their advantage to do so, as we make the best and strongest ware in the market. Terms cash. Address all communications to  
 HILLFINGER BROS., Fort Edward, N. Y.



FOR THE TRADE.  
**FLORAL WIRE DESIGNS.**  
 JAS. GRIFFITH,  
 THE PIONEER MANUFACTURER IN THE WEST,  
 305 Main Street, CINCINNATI, OHIO.  
 SEND FOR WHOLESALE PRICE LIST.

HAMMOND'S "SLUG SHOT",  
GRAPE DUST, &c.

IN LOTS TO SUIT THE TRADE.

J. C. VAUGHAN, Chicago. PLANT SEED CO., St. Louis. J. M. McCULLOUGH'S SONS, Cincinnati.  
 J. A. SIMMERS, Toronto, Ont. J. H. & A. MURDOCH, Pittsburg. A. W. LIVINGSTON'S SON, Columbus, O.  
 And by Eastern Wholesale Seedsmen.

## M. M. BAYERSDORFER &amp; CO.

56 N. 4th St., Philadelphia, Pa.,

Manufacturers and Importers of

## BASKETS \* AND \* FLORISTS' \* SUPPLIES.

A large variety of Baskets for

## COMMENCEMENTS.

## Ed. JANSEN,

Manufacturer of

## NOVELTIES IN BASKETS

FOR FLORISTS,

124 WEST 19TH ST., NEW YORK.

SPRING STOCK NOW READY.

## Philadelphia Immortelle Design Co.,

904 Filbert St., Philadelphia, Pa.

For DESIGNS, WHEAT SHEAVES,

Immortelle Letters and Baskets,

— SEND TRIAL ORDER. —



ONLY POTTERY MAKING A SPECIALTY OF

## FLOWER POTS

FOR FLORISTS.

## THE WHILLDIN POTTERY CO.,

713 &amp; 715 WHARTON ST.,

PHILADELPHIA.

## \* BARBED \*

## GLAZIER \* POINTS.

— \* \* —  
FOR SALE IN

BOSTON, MASS. . . . by Wm. J. STEWART,

67 Bromfield Street.

PROVIDENCE, R. I. . . . .

CHICAGO, ILL. . . . . J. C. VAUGHAN,

146 W. Washington Street.

Retail at 50c. per 1,000. 5,000 will be sent by Express free on receipt of \$2.50. PINEERS, Sec. Each.

## B. B. CHANDLER,

Patentee and Manufacturer,

HYDE PARK, MASS., U. S. A.

Mention American Florist.

ESTABLISHED, 1866.

## Floral Wire Designs,

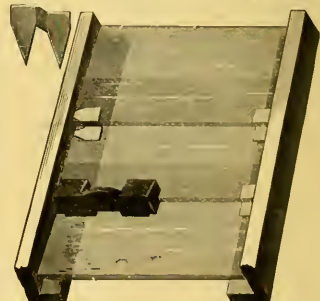
Manufactured by

## N. STEFFENS,

335 East 21st Street. - NEW YORK.

H. W. EAMES & CO.'S  
PATENT TWIN

## GLAZIER POINTS



## A USEFUL INVENTION

The twin point at the upper left hand corner of our represents the full size of points, while the tool that is used for pushing the points into the window frame is shown on the cut.

No more leaky Skylights! No more Slipping and Breaking of Glass in Greenhouses or Farmers' Sash.

These points the manufacturers claim are far superior to the old mode of setting glass, as they will hold each pane in place, thus not allowing the glass to slip, causing binding and consequent cracking. Each box contains 500 rights and 500 lefts. The manufacturers also make a tool for driving the points. These points are the cheapest and best, and most durable in the market, as testified to by many florists in every state in the union. Sold by most prominent seedsmen in the country. If you don't find them at your supply stores, send direct to the manufacturer as we have made arrangements with the Adams Express Co. for low rate of express charges to promote traffic, so you need not fear charges will be too high. A Liberal Discount to the Trade.

Price 35 cents a box. Tools 15 cents each. Address all orders and communications to the manufacturers.

H. W. EAMES & CO.,  
 Milford, Mass.  
 and send for samples before you do your building and repairs.

Mention American Florist.

Delegates to the next THE  
 convention will travel Pullman Car Line  
 via the



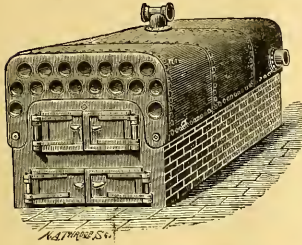
E. O. McCormick, Gen. Passenger Ag't, Chicago.

ESTABLISHED 1854.

## Devine's Boiler Works

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers.



Capacity from 350 to 10,000 feet of four-inch pipe.  
Send for New List.

**PETER DEVINE,**  
387 S. CANAL ST.,  
CHICAGO.

## Ives' Putty Machine.

Patented Jan. 3, 1887.

The best device ever invented for laying putty. With this you can make old leaky sash perfectly tight without removing the glass. It will do the work of five men in bedding glass.

Sent by Express on receipt of price, \$3.00

**J. H. IVES, DANBURY, CONN.****HALES' MOLE TRAP**

For destroying ground moles in lawns, parks, gardens and cemeteries. The only PERFECT mole trap in existence. Guaranteed to catch moles where all other traps fail. Sold by seedmen, Agricultural Implement and Hardware dealers, or sent by express on receipt of \$2.00 by **H. W. HALES, RIDGEWOOD, N. J.**

## Conservatories

GREENHOUSES, ETC.

Erected in any part of the U. S. or Canada  
Glazed on the

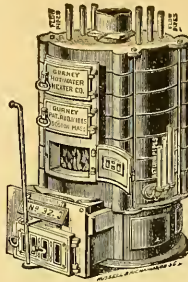
Helliwell Pat. Imperishable System  
OR WITH PUTTY.

For further testimonials, illustrated catalogue or estimates address

**JOSEPHUS PLENTY.**  
HOPTICULTURAL AND SKYLIGHT WORKS.

Offices, 124 Pearl Street, NEW YORK.

HOT BED SASH.  
VENTILATORS.  
WHITE FOR PRICES.  
FULL SIZE OF SASH BARS IN PINE OR CYPRESS. WE CARRY A FULL STOCK OF 12 1/4 and 16 foot lengths.  
**JOHN L. DIEZ & CO.,**  
530 N. Dear Street, CHICAGO.



ELEVATION.

**GURNEY HOT-WATER HEATER**

—| FOR WARMING |—

RESIDENCES, OFFICES, PUBLIC  
BUILDINGS, CONSERVATORIES, ETC.,

— BY —

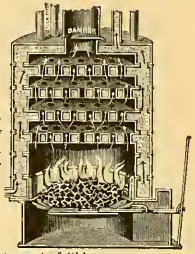
**HOT-WATER CIRCULATION.**

Have you investigated the Gurney system of heating by Hot Water? If not, it will pay you to do so. Send for our Illustrated Descriptive Catalogue, free to all.

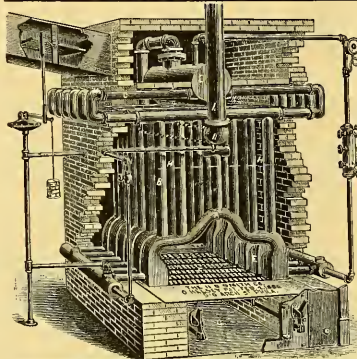
MANUFACTURED BY

**GURNEY HOT-WATER HEATER CO.,**

Office and Showroom, 237 Franklin Street, Boston, Mass.  
Rice & Whitacre M'g. Co., 42 W. Monroe St., Chicago, Ill., selling Agents west of Ohio.  
**IT PAYS TO DO WORK EARLY.**



SECTION.



ESTABLISHED 1853.

— THE —

**D. K. STEAM GENERATOR**

Is especially adapted to warming

GREENHOUSES, GRAPERIES  
AND CONSERVATORIES.

Special features insure

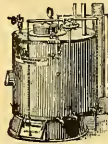
*Economy, Simplicity, Durability,*

Giving best results with least labor and fuel.

Send for DESCRIPTION.

**THE H. B. SMITH CO.,**

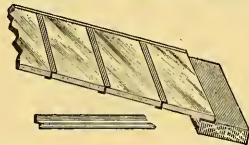
510 Arch Street, PHILADELPHIA, PA.  
Mention American Florist.

**Reduce your Coal Bills**  
**THE FURMAN STEAM HEATER**

ESPECIALLY ADAPTED FOR WARMING GREENHOUSES.

Gives a most uniform heat night and day. Can be run with less attention, and a SAVING of fully 20 to 25 Per Cent. in Fuel over any other method. Burns HARD or SOFT COAL. Endured by leading florists. Send for full illustrated Catalogue. Address **HERENDEN MANUFACTURING CO., GENEVA, N. Y.**

IMPROVED GLAZING.

**J. M. Gasser's Patent Zinc Joists,**

For putting glass without laps; makes it air and water tight; saves fuel and glass. No breakage from frost. Also the best improved fuel oil Burners for steam boilers. Send for sample and price list.

**J. M. GASSER,**  
101 Euclid Avenue, CLEVELAND, O.

**SASH BARS**

VENTILATORS, RIDGES, GUTTERING  
AND LUMBER.

NO WIDE-AWAKE FLORIST need be told  
it will pay him to use Sash Bars, etc. made from

— CLEAR CYPRESS. —

Bars all Shapes up to 20 feet long.

Send for circulars and estimates.

**LOCKLAND LUMBER CO.,**

LOCKLAND, HAMILTON CO., OHIO.

## PIPE AND FITTINGS FURNISHED

— TO —

PLANS AND SPECIFICATIONS.

Contracts solicited for

**HEATING GREENHOUSES.**

Most improved plans.

**ALL WORK GUARANTEED.**

Prices furnished on application.

**E. A. STIMSON & CO.,**

No. 22 and 24 Sears Street,

DAYTON, OHIO.

**GOLDMAN'S ATOMIZER AND SPRINKLER**

FOR A THOUSAND AND ONE USES

COMMENT UNNECESSARY



Practical  
and Useful.

You will  
not part  
with it.

For Flowers, Window Gardening, House Plants, Destroying Insects, and for various fine sprays. Most natural substitute for fog or dew. By dipping in water while closed, fills instantly. Balmily perforated; spray controlled by pressure of hand. Size of lemon squeezer. Weights, 5 oz. Exclusive Territory to Agents. Sells on its own merits; no talk. Sample by mail, 50 cts. This is the Atomizer that sold so well at the Danbury, Albany and other fairs. Florists and Seedmen, show it to your customers: sells fast; good profit. Excellent for indoor plants. Send for illustrated pamphlet and price to the trade. Mention this paper.

**M. GOLDMUN, Manufacturer, Pittsfield, Mass.**



## Index to Advertisers.

Advertising Rates, etc.	479
Allen, W. S.	479
Bayersdorfer, M. M. & Co.	483
Bell, W. T.	484
Benard, E.	477
Benger, H. H. & Co.	487
Blanc, A.	487
Boehve, G. & Bro.	487
Boyson, Jas. L.	477
Brackenridge & Co.	487
Brachne, L. B.	479
Bros. Ind. I. Gardens	487
Chandler, B. B.	488
Chapman Bros.	477
Clark, G. R. & Co.	481
Clark Bros.	481
Cook, J.	487
Critchell, B. P. & Co.	487
Corrie Bros.	482
Curwen, John Jr.	484
Dacke, H. A.	482
Dakota Wood Moss Co.	484
Desmond, Wm.	484
De Veer, J. A.	483
Devine, Peter	483
Dier, John L. & Co.	489
Dilger, Wm.	479
Dillon, J. L.	479, 483
Dinges & Conrad Co.	487
Dunkley, Joseph	487
Dunlop, Joseph	487
Eames, H. W. & Co.	488
Edwards, S. & Sons	487
Elliott, B. A. & Co.	486
Ellis Bros.	487
Faber, Jno. B.	484
Fassett, F. E. & Bro.	486
Faxon, M. B.	486
Fink & Co.	486
Fisher, Peter	487
Floral Exchange	477
Gasser, J. M.	486
Giddings, A.	484
Goldman, M.	489
Gray, Benj.	487
Griffith, Jas.	488
Griffith, N. S.	488
Harvey Heater Co.	489
Hales, H. W.	489
Hallock, V. H. & Son	488
Hammond, Benj.	488
Hammond & Hunter	479
Hendrick, James	477
Herenend Mfg. Co.	489
Herr, Albert M.	488
Hiley, Henry G.	484
Hilfinger Bros.	488
Hitchings & Co.	480
Hooker, H. M.	480
Hulsebosch Bros.	482
Hurt, Freeman	486
Iren, J. H.	489
Jansen, Ed.	488
Joosten, C. H.	482, 487
Kadletz, J.	477
Kennelott Bros.	479

King, James	482
Krick, W. C.	481
La Roche & Stahl	484
Lockland Lumber Co.	489
Low, Hugh & Co.	486
McAllister, F. E.	483
McCarthy, N. F. & Co.	487
McFarland, J. Horace	487
McTavish, G. A.	484
Mathews, Wm.	487
May, J. N.	477
Merrick, T. T.	487
Michel Plant & Seed Co.	483
Miller, Geo. W.	488, 487
Monon Route	488
Moon, Samuel C.	486
Moore, William	482
Morat, Edw.	477
Myers & Co.	480
Oshorne, C. F. & Bro.	486
Penman, Jas. A.	481
Pennock, Chas. E.	479
Perkins, J. N.	488
Phila. Im. Design Co.	488
Pienty, Joseph	489
Powers, C. J.	487
Quaker City Mch. Wks.	481
Ramsden, C.	485
Reed & Keller	487
Reemer, Frederick	484
Rolker, A. & Sons	487
Rupp, H. S. & Sons	484
Schlaefter, H.	477
Schlosser, F. Folliot	487
Schofield, D. C.	488
Schula, Jacob	477
Scolley, John A.	489
Segers Bros.	483
Segers & Co.	483
Siebrecht, Wiley	487
Simmons, W. F. & Co.	487
Situations, Wants	477
Smith, H. H. & Co.	487
Spooner, Wm. H.	477
Steffens, N.	488
Stewart, W. J.	479
Stinson, E. A. & Co.	489
Straus, C. & Co.	479
Studer, N.	486
Thompson, G. & Sons	487
Thompson, J. S. R.	487
Tuttle, Sidney & Co.	486
Van der Schoot & Son	483
Van Weeren Gl. & Kruyt	481
Van Zanten, G. V. & Co.	482
Vaughan, J. C.	479, 482
Ware, Thos. S.	484
Weathered, Thos. W.	490
Weich Bros.	488
Whitdin Pottery Co.	488
Wilks, S. Mfg. Co.	490
Willard, E.	481
Wilson, S.	487
Witbold, Geo.	487
Wood, L. C. & Bro.	489
Young, Thos. Jr. & Co.	479

## A National Flower.

A writer in the Boston *Globe* feels sad that we have no flower which may be called a national flower, as the German corn flower, the English rose, the Swiss edelweiss, the Scotch thistle and the Japanese chrysanthemum. He winds up by nominating the trailing arbutus to fill the vacant position of national flower of America.

JANESVILLE, WIS.—Trade fair. Very little demand all winter for set pieces or designs; for funerals mostly loose bouquets. Good sale for roses for parties. Holiday trade about the same as last year—good sale for holly; mistletoe very poor.



## GREENHOUSE HEATING AND VENTILATING.

Superior Hot Water Boilers.

JOHN A. SCOLLEY.

74 &amp; 76 Myrtle Ave., Brooklyn, N. Y.

Send for Catalogue.

## GREENHOUSE HEATING.

BY A. B. FOWLER.

Explains fully all the best systems of heating greenhouses by both hot water and low-pressure steam. Tells you the points to consider in selecting an apparatus. How to adjust same to various locations; gives the results of the latest scientific experiments. Shows how to compute the number of feet of pipe required for a given space; draft and other important matters. It is highly commended by Mr. John Thorpe and others. Postpaid, 75c.

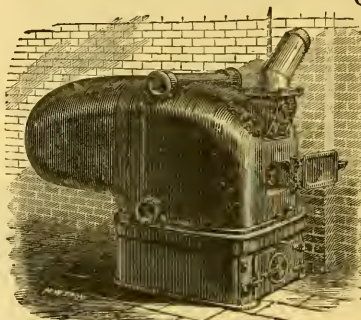
Sent on receipt of price. Address,  
**AMERICAN FLORIST,**  
CHICAGO.



Sectional View.

## Greenhouse Heating AND Ventilating HITCHINGS &amp; CO.

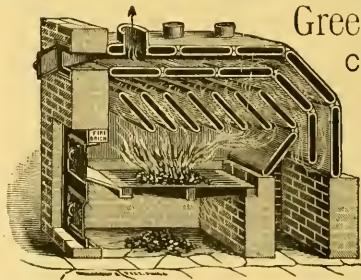
233 Mercer Street, New York.



Send 4 cents postage for Illustrated Catalogue.

## Improved Hot Water Boilers

For Heating



Greenhouses, Graperies, CONSERVATORIES, ETC.

ALSO

Cast Iron Pipe, Fittings, Valves and all Material for Heating by Hot Water.

Send for Catalogue.

MYERS &amp; CO.

1173 So. 9th St.,

PHILADELPHIA.

## THE CELEBRATED WILKS WATER HEATER!

For Heating

GREENHOUSES, DWELLINGS, POULTRY HOUSES, STORES, BATH TUBS, ETC., ETC.

Send for Price List.



S. Wilks Mfg. Co., Cor. Monroe &amp; Clinton Sts., Chicago



ALL SIZES OF SINGLE AND DOUBLE THICK

GLASS FOR GREENHOUSES.

ALL GLAZIERS' SUPPLIES.

Write for Latest Prices. Mention American Florist.

# THE AMERICAN FLORIST



America is "the Prow of the Vessel; there may be more comfort in the Prow than in the Cabin, for we are the first to touch Unknown Seas."

Vol. III.

CHICAGO AND NEW YORK, JUNE 15, 1888.

No. 69.

## THE AMERICAN FLORIST

Copyright, 1887, by American Florist Company.  
Entered as Second-class Mail matter.

Published on the 1st and 15th of each month by  
THE AMERICAN FLORIST COMPANY.

GENERAL OFFICES, 54 La Salle Street, Chicago.  
EASTERN OFFICE,  
Room 81, Vanderbilt Building, New York.

All communications should be addressed to the  
general office at Chicago.

SOCIETY OF AMERICAN FLORISTS.—E. G. Hill,  
Richmond, Ind., president; John N. May, Sum-  
mit, N. J., vice-president; M. A. Hunt, Terre  
Haute, Ind., treasurer; Wm. J. Stewart, 67 Bron-  
field street, Boston, Mass., secretary. The fourth  
annual meeting at New York, August 21, 22, 23,  
1888.

### The Exhibition at New York.

It seems from what can now be learned that the exhibition at the convention will be what we ought to have. The space for plants and cut flowers has been allotted and it appears from the number of applicants that it is too small, though it is some 6,000 feet in extent.

A limited amount of space has been set aside for the exhibition of bulbs, implements, supplies and sundries, for which a rental will be charged. Tables will be erected uniformly at a given height and width for which no extra charge will be made, but should exhibitors desire to erect any other staging, they must do so at their own expense. The management will endeavor to provide lumber and all necessary material for such purposes if due notice is given.

Exhibitors will find it advantageous to send particulars of their display to John Thorpe, Pearl River, N. Y., who will give all necessary particulars respecting space, etc.

IF YOU are going to exhibit at the New York meeting, call the special attention of the trade to your exhibit through the columns of the CONVENTION SUPPLEMENT which will be mailed with the issue of August 15 next.

SUBSCRIPTIONS for the AMERICAN FLORIST may be left with any of the following:

Baltimore, R. J. Holiday.	New Orleans, H. A. Despommier.
Boston, W. J. Stewart.	Philadelphia, Edwin Lonsdale.
Buffalo, Daniel B. Long.	New York, W. S. Allen.
Cincinnati, Harry Sunderbruch.	Aug. Rolker & Sons.
Cleveland, O., Mrs. E. G. Campbell.	C. H. Joosten.
Detroit, J. Brettmeyer & Sons.	Pittsburgh, J. R. & A. Murdoch.
Hamilton, Ont., Webster Bros.	St. Louis, Michel Plant & Seed Co.
Harrisburg, Pa., J. Horace McFarland.	San Francisco, Thos. A. Cox & Co.
Louisville, George Thompson & Sons.	Toronto, Ont., J. A. Simmers.
	Washington, D. C., L. Schmid & Sons.

### New York Notes and Comments.

The long-suffering growers who have been raising flowers all winter for the general good, without very largely benefiting their own bank accounts, feel rather better now. Flowers have sold better this spring than usual; they certainly do not bring large prices, but they sell, and that is not always the case at this season.

The spring blooming dark roses, Monsieur Boncenne, Baron de Bonstetten and Prince Camille de Rohan, are all sold under the name of "Black Jacks"; some fine flowers have been coming in of late. Monsieur Boncenne is a fine thing, very rich and velvety and a free bloomer, though Ellwanger gives preference to Baron de Bonstetten.

Decoration Day must have brought a certain amount of money into the florists' pockets, for it was elaborately observed, but a good many of the florists who hold what is considered the exclusively fashionable trade say that it made comparatively little difference to them. Suburban florists found a large call for plants to be used in the cemeteries, hydrangeas, astilbes, deutzias, and the like. In fact, every festival shows that popular taste is turning towards plants and loose flowers, rather than set designs. There is always a certain demand for designs in immortelles on Decoration Day, simply because of their keeping qualities. A good many florists do not like to make them, because they have such a machine-made aspect, and do little credit to the maker's taste, but of course they have to meet the demands made upon them.

Mr. Le Moults thinks his Decoration Day trade was rather larger than previous years; in his case it chiefly took the form of designs. Among other large pieces, he made a column about ten feet high with an urn on top, which was further decorated by a G. A. R. emblem; this was ordered by the New York Mail and Express as a memorial to General U. S. Grant. After being on exhibition at the Mail and Express office it was taken to the tomb in Riverside Park. Mr. Le Moults always has a good deal to do for the various school commencements, which give a little work to the florists through June and early July; after these are over there is little doing, except in the way of funerals.

Isaac Buchanan is busy with the Union League club grounds; the spring bedding is being removed for summer stuff. Some beds of cacti form a foil to the brighter foliage; we don't see this class of plants very largely used, though most growers have a dusty bench of cactus over the stake hole, or in some other secluded spot. A bed or two, forming a contrast to other plants, is really effective, as in

this case. For a dry, exposed spot, where even the ubiquitous purslane won't grow without encouragement, our wild opuntia is admirable, and gives a profusion of golden flowers. No one will go trespassing recklessly on that flower-bed either. As a rule the city florists complain very much of the bedding out trade; they say it is very light and generally unsatisfactory. Perhaps these hard times their patrons have taken to buying plants at the auctions; they certainly do not bring large prices there as a rule. Good-sized ivies went recently for three cents, and other things in proportion.

The orchid fanciers had their chance on June 7, when Young & Elliott sold several thousand plants from Frederick Mau, both established and freshly imported. A lot of very fine things were among them. One of the largest commercial growers, when asked whether there was any danger of overloading with orchids, said that people who bought with discretion and judgment need not be afraid of investing for five years to come. After that he was not prepared to say. The question for a man to decide is how to buy. Poor varieties of orchids are about the most useless thing a man can invest in, but there is little risk in buying good free-flowering species.

At this season there is apt to be a decided scarcity of carnations; they are not doing anything under glass, nor yet out of doors. Out door roses are not in yet; as previous indications showed, outdoor stuff is late. Lilac is over now; though much of it was very good we saw comparatively little of the newer and improved sorts. A Canadian grower, Mr. Dougall, I think, has sent out a lot of beautiful improved lilacs, varying greatly in color. The panicles of bloom are larger than usual, and more numerous.

Some one around New York must have a lot of the old-fashioned corn flowers, or "Ragged Robin," for there are quantities of it on the street. It is a pretty old-fashioned thing, and its intense blue is unlike any other flower. It ought to take well with our German friends, since the effort has been made to install the Korn blume as the national flower of Germany. It is a pretty idea of a recent correspondent to call the little trailing arbutus our national flower; the next thing in order will be an amendment to the constitution providing for its protection. Otherwise it will surely be as extinct as the dodo or greenback party within a few years.

EMILY LOUISE TAPLIN.

NURSERYMEN'S CONVENTION.—The thirtieth annual meeting of the American Association of Nurserymen, occurs at Detroit, Mich., beginning Wednesday the 20th inst.



## Long Island Plant Notes.

BY WM. FALCONER.

OUR AMSONIAS are now in full bloom—blue—but they are not showy enough to be worth including among choice hardy plants.

SILENE PENNSYLVANICA—wild pink—grows as well in the garden as it does in the wood and makes a real pretty plant.

ACHILLEA TOMENTOSA is the best thing of its kind with yellow flowers now in bloom. It is a very hardy plant and lasts a long time in flower.

HERESY.—If I were to call the fraxinellas "stinking, sticky things," folks might think me crazy, but that's my opinion of them anyway, and I've been growing them for the past twenty-five years; yes, they are good showy border plants, everlasting in their life, but as cut flowers I have no use for them.

A TOP DRESSING of good manure has a visible invigorating influence on a bed of lily of the valley.

ROSA RUGOSA ALBA, in bloom May 30, was our earliest outdoor rose this season.

PYRETHRUM ROSEUM.—The double varieties, white, pink, rose, crimson, are now beginning to bloom, and what lovely flowers they are! They are quite hardy with me and submit readily to division; indeed they may be multiplied very extensively by dividing the old plants in spring.

VINCETOXICUM JAPONICUM is quite a nice hardy herbaceous plant now in flower with me. The flowers are white in loose cymes from the axils along the stems. The plants are one to two feet high with a tendency to a greater height and viny form.

HEMEROCALLIS DUMORTIERI has orange-yellow flowers and is now in bloom. The plants are neat but vigorous, and without the erratic wandering nature of some of the other species, and the flowers are handsome and well fitted for cutting.

HEMEROCALLIS FLAVA with clear yellow flowers is also in bloom and a desirable plant. These plants are worth growing because of the amount of neglect they will stand and flourish, and they will thrive in sunshine or shade, in cultivated or wild land.

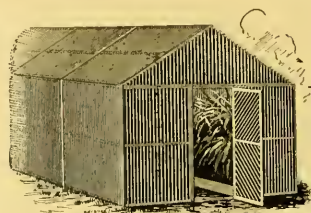
CAMPANULA PYRAMIDALIS sown last summer, planted out in the fall and left out of doors all winter have lived all right and are now vigorous masses that promise to give us, in a few weeks, some fine flower stems.

VIOLA PEDATA grows in immense quantity on the plains between here and New York, and is a most lovely little flower that accommodates itself very easily to artificial cultivation. The finest variety is called bicolor, which I have not yet found wild hereabout; but white flowered forms are not infrequent.

DECORATION DAY FLOWERS.—In the way of outdoor flowers we had nothing better than peonias, lily of the valley and exochorda. *Pæonia tenuifolia* fl. pl. was the brightest of all blossoms, and the tree peonias the most massive. Other peonias were not yet in bloom. Lily of the valley was in perfection, so too was *Exochorda grandiflora*. Of course lilacs were abundant but nobody wanted them, they had lots of lilac at home. Deutzias were not yet open; there was a lull in spiræa time—*S. Thunbergii* and *prunifolia* fl. pl. being past and *Van Houttei* and *Cantonensis* not in yet.

ENGLISH PRIMROSES.—Miss Taplin, p. 468, thinks there may be some difficulty in getting it true from seed, or rather getting the seed true. I haven't found it so. And it isn't the winter so much as the summer that proves hurtful to it in this country. Prof. C. S. Sargent, at Brookline, Mass., has it well naturalized in a sheltered wood-belt near the lake in his grounds. I also know of it having been naturalized elsewhere in Massachusetts.

COSMOS BIPINNATUS is one of the prettiest flowers in our grounds to-day. It is blooming freely and we have had it in good bloom since the first of May. I am well aware that its proper time of blooming is between August and October. But I sowed the seeds in boxes first of March, potted off the seedlings singly and starved them in 3 or 4 inch pots till they set flower buds, then planted them out middle of May.



SUMMER HOUSE FOR TROPICAL PLANTS.

A PINK CARPET.—*Saponaria ocymoides* now is at its best with us and a very pretty pink mat it is. It is a hardy perennial of dense mat-like trailing habit and extremely profuse blooming. It should occupy a like position in the rock garden in early summer that the moss pinks (*Phlox subulata*) do in spring. And as it is a plant of generous growth we can use it over wide breadths. Easily gotten up from seed. Plants bloom the second year.

A BLUE CARPET.—Among hardy plants I know of nothing to surpass *Veronica rupestris*. It is a dwarf moss-like plant now with us coming into bloom. Its flowers are bright blue and borne in the greatest profusion. The plants spread a good deal and may be used as masses in rockwork or as an edging in the garden. The easiest way to propagate it is by division in early spring, and in this way it can be multiplied in great quantity for every little bit will make a plant.

ARUNDO DONAX.—For years back we have grown this reed as a hardy plant and with much success. Its largest canes last year measured eighteen feet two inches in length. In winter time we cut it over and cart on a few loads of rank manure over the patch as a mulching, and in spring the shoots spring up numerous and strong. Last winter we did the same thing, and for the first time in several years the arundo has suffered. It is not the intensity of the cold, but the long continuation of the frost in the ground—from December till into April—that has injured the roots.

ARE YOU going to attend the meeting of the Society of American Florists in New York in August?

## A Summer House for Tropical Plants.

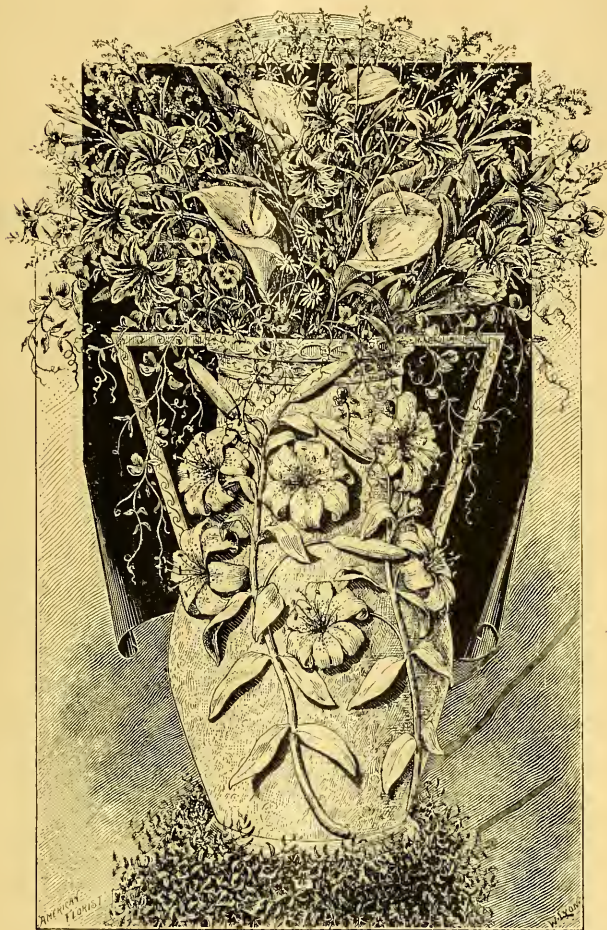
Our illustration is of a house used for summering specimen palms, ferns, etc. The frame work is covered with lath shades which are in sections and the house may be easily taken to pieces and the sections stowed away during the winter. No better place can be had than a house of this kind for summering this class of plants as it furnishes sufficient shade and at the same time allows a free circulation of air. The lath are set about half an inch apart. Where the florist has not a sufficient quantity of plants to warrant the expense of building a special house of this kind, a number of the sections of shading may be placed flat on posts of the required height and others on edge around the sides. No matter how small the number of specimen plants you have it will pay to erect a similar structure of some sort to summer them in.

## Azaleas.

In conversation with a neighboring florist, the week before Easter, while standing in one of my houses looking gay with blooming azaleas of all colors and intended for Easter sale and decorating purposes the remark was made: How few of our florists appreciate the merits and importance of a good collection of *Azalea indica* in a retail establishment, and how seldom do we find them in good condition in the few places where we do find any. The majority of florists seem to think that the azalea is a plant which requires a special culture, some claim that our climate is too hot and dry for them, that they need shading from the hot sun in summer, etc. But we can grow as good plants here in the United States as they grow in Europe, wherefrom thousands of azaleas are annually imported, if we only make up our mind to do so. Let every florist who has a retail plant trade try to grow some and be convinced that it pays. Of course it takes two or three years to get good showy, salable plants, but even as soon as the second year you will reap an acceptable return on your investment and labor, for there will be many strong, bushy little plants among your lot, well set with buds, and when in flower will sell at a very fair price; people can't resist buying when they see them covered with bloom.

To grow azaleas we prefer to stick in cuttings of half ripened wood in autumn, in the cool end of the propagating bench or in boxes placed in the same situation, and after shading them for ten or twelve days, if the sun is very strong, let them remain there until well rooted. There is no difficulty in rooting them if you give them time, clean, sharp sand and an atmosphere that is not too dry. After being well rooted pot off in 2½-inch pots, using two parts decayed sod and one part peat or leaf-mold with a liberal sprinkling of sharp sand. We give no drainage in the first potting, but the succeeding repotting and afterwards, drain the pots well. The little plants should now have a good place near the glass in ordinary greenhouse temperature, where they soon will begin to grow and after six or eight weeks shall want a repotting in 3½-inch pots. We keep them for the first year entirely in the house and by pinching, repotting, liberal watering and syringing in hot weather will have good stocky plants in a little over a year, but no buds, as they have been kept growing summer and winter. The following





GORDON'S VASE.

spring most of them, except the weakest, are, after repotting, plunged in the open air and treated the same as the older plants, in the full sun, watering and syringing daily and by the following fall they are well set with buds and are salable plants in 5 or 6-inch pots. The same result may be obtained by planting from 2½-inch pots into a bench under glass, filled with four or five inches of suitable soil and giving a similar treatment as to watering, etc., potting them the following spring or summer in 5 or 6-inch pots, according to size and variety, but unless growing in larger quantities, filling a large space on the bench or the whole of it, this way is not desirable for the retail grower, as it requires more space from the very beginning.

What plant will make more show than a well grown azalea of any color in a greenhouse among other plants, or for decorating purposes. And you can have them in bloom from December to the

middle of May by forcing in succession, or keeping others back in a cold pit or cold house. Some varieties force very early, others are more adapted to being kept back until May, so we may well say that for fully five months in the year we can have our greenhouses made attractive by gorgeous blooming azaleas. Another point in their favor for the retail florist is their usefulness in making up floral designs, as they fill in very prettily, are not so compact and stiff as carnations, and as we have a number of varieties with firm, lasting petals now, the old objection to their poor keeping quality is entirely overcome. Such varieties as Flag of Truce, A. Borsig, Bernard Andre alba and others, can even be shipped to other parts of the country with entire safety, if packed with a little discrimination and nothing heavy on top to crush or bruise them. There is an endless variety of colors, from pure white through all the rose, pink, lilac

and purple shades to deep and rich crimson and scarlet, striped and flamed, but all are beautiful and I have never seen or heard anybody find fault with an azalea in bloom, even if the color was a rather dull one, if the plant was in a fair healthy condition and of decent shape.

If old plants have been neglected and are unshapely and loose in growth, don't be afraid to use the knife. Prune in severely into the old wood, and should any of the young growth then grow too strong, pinch these shoots in again; April or May is the best time to do this, as the plants will then be in full action, while if you prune into the old wood in fall or winter, when sap is nearly at a standstill, some of the wood is inclined to die out and the plant may become a worse looking specimen than before the operation.

I find it very profitable to have some white azaleas in bloom from Christmas until May and keep a number of large plants for this purpose. We take in one, two, or more of these at intervals of two or three weeks and can always find use for every flower in floral work. I have a cold house for them where the temperature frequently goes down below freezing point, using fire-heat only in very severe weather, and we take plants from this place into a temperate house to bring them on to flower. After forcing a plant for two or three years in succession the plant acquires a tendency to mature its growth in advance of the others and consequently it will be a good plan to use the same plants for first crop of bloom.

If we only could induce our florists to arrange for an azalea show in April, the public as well as the trade would appreciate such an exhibition, perhaps far more than they do now the chrysanthemum shows in the autumn, and I think there would be, for the trade, more pecuniary benefit derived from such an exhibition than there is from the last named, of which, I must say, I am no particular friend. Not that I dislike the flower, but because chrysanthemums are so plentiful in their season that the price is kept too low and it does not pay to handle them. Let us grow more and better azaleas; any good florist is able to grow his own plants if he makes up his mind to do so, and above all let us take care of what we have got and make decent, compact plants of them by pruning into compact forms. Allow them room enough so the light can play all around the plants and do not stick them in some corner against a wall, among and under some other stuff, where they surely will get one-sided and lose their lower branches.

J. B. KELLER.

Rochester, N. Y.

#### Vase for Lawn Decoration.

The vase pictured is introduced by Fred Gordon, New York, for ornamenting the lawn for garden parties. It is about three feet high and should stand on a vine pedestal. It is composed of white paper mache, and stalks of *Lilium auratum* of the same material are running over it in relief. The entire piece and ornamentation is covered over with a thin plaster, and on the vase itself are indistinct indications of small scroll work. It is filled with callas, aquilegias, irises, daisies, pansies, tulips, amaryllis, sweet peas, vines and grasses.

PRIMULA OBCONICA continues to grow in popularity. Indications are that it will soon be standard stock.





I think the Puritan is a good rose and that it will be more of a favorite another season. We have a thousand plants, and considering how late we put them in, I think they have done well. We have cut some splendid blooms and all our visitors seem to be charmed with the rose.

C. F. FRIEND,  
Gardener to Otto Andrea, Esq.  
Central Valley, N. Y.

#### The Modern Knights and the Puritan Shield.

An old legend relates that two Knights coming from opposite directions met at a shield which stood upright on the plain. Quoth one brave Knight, "How odd that such a handsome brass shield should be left here in this manner." "Brass indeed," replied the other, "Any one who is not blind can easily see that it is a silver shield." The dispute was about to end in blows when the discovery was made that each was right looking from his point of view as the shield had two faces, one of brass and the other of silver.

#### New Hybrids.

Referring to Mr. W. Falconer's remarks on page 450, respecting my hybrids between *Rosa rugosa* and Harrison's Yellow (the first being the mother in every case), it may further interest your readers to know that last summer we used the pollen of many hybrid remontants and several teas upon *Rosa rugosa*. The seeds were planted in boxes last February and we now have sixty plants varying in height from two to ten inches. Not one of these hybrids thus far resembles the mother (*rugosa*) in any way, which, when we consider its very distinct characteristics, seems a remarkable and interesting fact.

E. S. CARMAN,  
Ed. Rural New-Yorker.

#### Notes from the London Garden.

HER MAJESTY.—Another indication of this rose's dislike to manetti as a stock has now been given by several apparently strong plants worked on it "falling out" when pruned, and the union of stock and scion in most cases appears less sound than when budded on dwarf briar.

VICTOR VERDIER.—The superior rooting powers of the roses of the Victor Verdier family are never more apparent than at this time of year, when the rows of such varieties as Victor Verdier, Mrs. Baker, Lady Mary Fitzwilliam, Captain Christy, Hippolyte Jamain, &c., are already green with pushing leaves in the cutting beds, with hardly a gap in the row; while all the other types have a considerable proportion of "misses," and are hardly any of them yet on the move.

#### Packing Roses for Market.

We give an illustration of a tray of roses packed for market in a manner which will bring the most satisfactory

results to the shipper. The tray illustrated is of galvanized iron, 22x12 inches in size, and 3 inches deep. The strips of wood at the ends are  $\frac{1}{4}$  inch thick and are securely fastened to the pan by wire. A number of the trays are packed in a box of suitable size, the strip at the end of the trays preventing any crushing of the flowers in a lower tray. A little packing should be placed under the buds of the first row to keep them from contact with the bottom of the pan, the others follow in succession, laying on the foliage of the preceding rows. For summer shipment ice is placed on the stems of the flowers last placed in the tray. Roses so packed arrive in excellent condition and give satisfaction all around. The sketch was made from a tray of roses as sent to market by Mr. M. A. Hunt, Terre Haute, Ind.



PACKING ROSES

#### Cornelia Cook.

In answer to your correspondent A. M. P. This rose usually is a most vigorous grower, planted in a bed. To control its growth and ripen the wood for winter flowering purposes has always been a difficult matter. Among the chief points to be observed are to keep a healthy vigorous clean growth during the early summer, judiciously thin out all superfluous wood so that light and air may be admitted to the strongest growths, and avoid overcrowding, gradually withholding moisture at the roots toward the end of summer.

The fall pruning should be deferred until the warm weather is over. If attempted too soon, a weak premature break of the ripened wood is usually induced, at the expense of the plant. In pruning in the fall all weak lateral shoots should be taken out, and the strongest, best ripened shoots well shortened in, but not to such an extent as to denude the plant of foliage. In fact, each shoot that remains should have three or four healthy ripe sound leaves left on them. They may be trained or bent in any desired form or shape, providing that the branches gradually ascend from the base of the plants.

It is not possible to give definite instructions in regard to the management of this (the queen of all white roses), but a close observation of its wants and peculiarities will do more for any one than columns of advice. It is most impatient of too high a temperature, being easily drawn into a soft growth, and easily mildewed. Perfect ventilation should be given at all times. When success has been attained all the care and trouble is amply rewarded.

LONG ISLAND.

SEVERAL Chicago rose growers are already clearing out benches, putting in new soil and replanting with young stock for another season. They find it best to

be somewhat ahead of the eastern growers in this matter as autumn in the west is not as good a growing season as in the east, and growth should be made earlier here in consequence.

#### A Few Observations.

Allow me to present for the criticism of your readers a few observations in reference to roses from my own experience. Some of the points have been made and repeated a number of times in the FLORIST but I think no harm will be done in reiterating them.

The treatment of the plants, especially watering, should be largely determined by the nature of the soil in use. There is nothing so detrimental to the health and the products of roses as overwatering and overfeeding. During the winter months it is best to allow the soil to be rather dry, supplying the necessary moisture by two or three careful syringings a day. One good watering per month at the roots may be found to be sufficient. It is preferable to use porous, lighter soils for most varieties, if it can be had. Plants grown under these conditions will not make such strong, soft wood, but it will be firmer and healthier and the flowers will be of more perfect shape and better color.

Heavy soils are dangerous, when the attendant is not most careful about watering and syringing. By the careless handling of the hose about twice a day, such soil is too apt to be overwatered and if a dull, dark week then sets in the handsomest house of roses may drop their leaves. If much feed has been used, either in the soil or on top of it, it will be all the worse. I believe the chief cause of bullheads in Perles and Bennetts, so much complained of, is due to an impaired state of health, produced by a too rich soil and overwatering. I am almost sure of it. No animal manures should be mixed with the soil, unless thoroughly decomposed, and then only in limited quantities, also very little bone meal. Most all soils have nourishment enough within them to last until February and will thus produce healthier plants and better flowers.

Mulching should be employed to no greater extent than to protect the surface of the soil from drying out too much and to induce the formation of soft roots near the surface. It is best to supply feed in liquid form and not strong. Do not water your rose beds, unless there is strong probability of several consecutive bright days. By using a not too heavy soil; by careful watering; by using rather small quantities of feed; by ventilating less or more on every possible day on the side opposite to the direction of the wind; by not allowing the temperature to drop low at night through negligence, there is no good reason why roses should not be in good condition, free from mildew, black spot, grubs, damping or rotting off, dropping the leaves, deformed flowers or imperfect color.

J. W. MERTZ.

COST OF GROWING.—Who can tell us the actual cost of growing and marketing, (at wholesale) 1,000 tea roses, (of standard varieties) in 2½-inch pots? Also the cost of growing and marketing 5,000 tea roses of same kind and size? Who can tell us the exact cost of growing and marketing under same conditions 1,000 hybrid remontant roses? Also 5,000 of the same? Send in your figures. We



THE MODERN KNIGHTS AND THE PURITAN SHIELD.

expect they will vary considerably, but by securing records from all sections we may get an average which will be of value.

**VENTILATORS.**—John Bohan of the Garfield Park Rose Co., Chicago, has a row of ventilators placed over a side walk in addition to those at the ridge, but concludes that he doesn't want any more in that position. He says that he has to guard far more carefully against mildew from those ventilators than from those at the ridge.

#### Packing Plants—Another Protest.

I desire to join Mr. Williams and Westgate & Son in their gentle protest against the universal custom of crushing the balls of dirt together when shipping plants. At least it seems to be universal because of plants bought this year from every point of the compass they have been invariably so crushed. I begged one firm in affecting terms of entreaty to turn the plant out and wrap it carefully just as it came from the pot and they did actually wrap up about twenty-five in that way when the genius of total depravity seemed to get the best of them and the remainder, several hundred, were everlastingly smashed together in the old fashion.

How shall we pot plants thus treated? Pot them as they are or press the ball of dirt back into something like the original shape? I do the latter as a choice between two evils and when I hear the roots crack, I am sorry to say, it evokes ejaculations better fitted for a ward meeting than a tea-table. Plants thus inhumanly treated get over it, but that is by no fault of the shipper, who has done his best to ruin them. Growing plants in pots is itself a deviation from nature but the plant submits to fate and adapts itself to its environments, growing its roots in circles instead of downwards or outwards and eventually forgets, or seems to forget, its original nature. Just when it is cheerfully accepting its abnormal state and sending a thousand tiny rootlets in concentric and embracing circles, the inhuman shipper lifts four or five and crushes the circles into pancakes and we get the mass of roots and dirt out from the bundle in prisms, dodecahedrons and every other shape except that of a truncated cone, in which they were grown. But the burlesque is that the hand of the shipper who has thus crushed a thousand shapely roots

into a shapeless mass, takes the plants, bleeding from a thousand veins, and wraps them tenderly in soft moss and paper as if they were too fragile for aught but tender handling. When I see that careful moss packing and those crushed, mutilated and mangled roots the incongruity makes me tired. I used to think we were the only sufferers and that perhaps it arose out of the very general but greatly mistaken notion, that anything will do for Texas, but since I find it general, I guess it comes from the evil arising out of the fall of Adam. I make my protest modestly, being but an humble member of the great profession. There may be some occult and deep meaning to it which is not embraced in my limited knowledge of plant physiology, if so I would travel a thousand miles to learn from the great lights the secret of raising plants by crushing and bruising the roots.

The plant trade is over here and my stock plants under humane treatment and good rains are growing so madly that you can almost hear them grow, but if there is a better way of raising plants and children I want to know it. It may be rough treatment is the best. Mark Twain says the best way to raise a boy is by the hair. Perhaps the best way to raise a plant is to smash the roots. Quien Sabe?

J. H. HURWOOD.

Waco, Tex.

#### Are You Going to Build?

Are you going to build any new houses this year? If you are considering the matter now, look well at all sides of the question before you make a start. Are the houses you now have all in first-class condition? If not, first devote your attention to them. After that is done, and they are all in strictly first-class shape, if you still think you need more room, and have the money with which to build, go ahead, but don't build at all unless you can do it right. Build good houses or don't build any.

In a large majority of cases where florists build new houses the money would make far better returns if invested in improving the houses they already have; in arranging for a better water supply; in securing labor-saving tools; in employing extra labor at a time when it is needed; in laying in a full winter's supply of fuel at a time when teams and hands are not employed otherwise, and coal is cheap, and in securing liberal discounts for cash on bills of goods.

In any event, before starting to build, draw a plan of the sort of house you want, and remember that a poorly constructed house is an expensive one in the end. If your money is limited build a few good houses with modern conveniences, rather than a larger number, which will always be eyesores, be a continual expense for repairs and begin to tumble down in a few years. Well built houses may cost a little more at the start but they are the cheapest in the end.

By well built houses we do not mean those to which any useless ornament has been added, but those in the construction of which first-class, durable material has been used, where the wood-work has been treated to several coats of paint, the posts set on stones, iron pipes used as supports, either wooden or drained cement walks, sides of solid beds made of brick, convenient ventilating machinery, water supply carried to every point of the house and a hundred other little conveniences which save labor and add efficiency. You know what you would like to have, and our advice is to have what you do have good even if you can't have so much of it.

#### Repairs.

The time for annual repairs will soon be at hand. Are you going to rebuild that boiler shed of yours or will you continue to drag coal or coke across the bare ground by the shovelful, throw a little fuel and a great deal of dirt on the fire, and wonder why your boiler don't do as good work as your neighbor's? By the way, if you do rebuild, we advise you to build the foundation before you put on the roof. Many florists who are of necessity amateur carpenters generally begin at the top and work down. Don't be so ambitious! The roof won't amount to a row of pins unless it has a solid foundation to stand on. In visiting florists' places we have observed many such structures which though but a few years old were already liable to topple over at any moment. Such a structure is an expensive one in the end.

Do your stoke holes consist of simple holes in the ground "sided up" by nothing but the soil and coal dirt? If so, please have them changed into respectable brick-lined pits, and a good brick or board floor to the boiler shed before you invite us to call on you again.

Are your houses provided with well drained cement or wooden walks? Unless your soil is nearly pure gravel you certainly should have them in every house. A good, cheap wooden walk can be made by running 2 x 4s on each side and tacking on narrow boards of chestnut or yellow pine crosswise, leaving half an inch space between. Then it will not be necessary for yourself and visitors to skate along in the mud or to straddle the walk when that leaky hose of yours has turned it into a miniature canal. Also please put in a strong new bench in place of that old one which was so rotten that it came down bodily when we grasped it to hold ourself up when slipping in the slimy canal which you dignified by the name of walk.

How about that house where the slime and dirt has accumulated on the sash bars until the grime is half an inch thick? Are you going to take the glass out, scrape and paint the bars and reglaze the house, or are you going to entirely rebuild it? We would advise you to do either one or the other before wasting any more labor or fuel in again attempting to grow any thing in it.



## The Calceolaria.

The value of these as early spring pot plants has been forcibly brought before Chicago florists by the large quantities of well bloomed plants which have this spring decorated the greenhouses, at the various public parks. Many florists have already had inquiries for them from customers who had admired them at the park conservatories, and one florist states that he could have sold quite a quantity readily at from \$1 to \$1.50 each. In spite of their fragile appearance they stand transportation well and last a long time in living rooms. Two plants which were already past their best remained in good condition with us for two weeks when placed in an east window, after the plants had been carted around considerable, as well as being left over night at the photographer's place of business. As they can be easily grown and good plants can be retailed at 50 cents each, realizing a good profit at that figure, it seems strange that they have been so neglected by florists.

Mr. Stromback, head gardener at Lincoln Park, Chicago, sows the seed the latter part of August. The seedlings are pricked out into boxes as soon as large enough to handle, and when they have grown there to a sufficient size they are potted singly into 2½-inch pots, and kept in a temperature of 50° to 55°, close to the glass and well watered—the calceolaria should never be allowed to become dry. Fumigate regularly once a week as if greenflies get a start on them it is very hard to get rid of them without injuring the plants. When well pot bound in 2½-inch pots repot into 4½-inch pots and if very strong plants are wanted they should be subsequently transferred to 5-inch or 6-inch pots. The soil should be light but rich. The plants should be lightly shaded in spring when the sun is strong and plenty of air should be given at all times when weather will permit. Plants fully equal to the illustration may be easily grown by any careful grower. A good strain of seed is of course essential.

As an illustration of the manner in which these plants when in bloom take the popular fancy, we must relate that Governor Oglesby, who recently visited the Lincoln Park greenhouses in this city, was so taken with them that a plant was presented to him, and he would not allow it to be shipped to his home in Springfield, but after having it wrapped up in paper took it in his arms and carried it tenderly home himself.

Cultural notes on calceolarias by Wm. Falconer may be found on page 368 of Vol. II, May 1 issue of 1887.

## An International Race of Pansies.

With great interest I read the report of Mr. Denys Zirngiebel under the above heading in a recent issue of the *FLORIST*. Of course the Bugnot pansies possess very fine colors, but the flat form of the flower and the slender growth of the plants I do not like. The flowers should stand on stiff stems, the petals should be of good substance, thick and velvety, and not so thin and weak that when the wind blows the flowers resemble a lot of butterflies on the wing. This first requisite of a good pansy is not to be found in the Bugnot strains. Florists prefer flowers with thick petals, as they keep better when cut and used in bouquets, etc.

Mr. Zirngiebel says in his report "seed was procured direct from the most repu-

ted pansy growers in England, France and Germany, with the request that as the seed was to be used for competition, to send the best they had, regardless of cost," and those who read my name in his report will imagine that he had secured seed from me last year, but the fact is I have sent him none since 1885, since which time I have made great improvements in my strains. My best strain—the "Giant Five Spotted"—was not offered till 1886. I therefore think that Mr. Zirngiebel hardly treated me fairly in his tests and consequently in his report.

FRED. ROEMER.

Quedlinburg, Germany.

## Strengthening Roofs of Small Greenhouses.

The accompanying sketch shows a small iron truss used by Mr. Peter Henderson, Jersey City, to strengthen the



roofs of a number of his 11-foot houses. It seemed to answer the purpose admirably and offer little, if any, obstruction to light. It is of cast iron, lightly made, and attached to the rafters by screws.

## A Point for Southern Readers.

Of the large quantities of Cape Jessamine (*gardenia*) buds shipped to the north each spring a very large portion are worthless when received through ignorant or careless packing. As these buds when received in good condition are very welcome and useful, especially at Decoration Day time, we give a few directions for packing in the hope of benefitting both shipper and consignee.

The flowers should be cut only when they have attained their fullest development as buds, but before the flowers open. Cutting the buds while green, or the flowers after they are open is not only a waste of time but of money as well, in paying transportation on something which is absolutely worthless to any one. The buds should be cut with stems not less than six inches in length (the foliage may be removed from the lower part of the stem if the latter is very long, but plenty of foliage should be left for a few inches below the flower) and the stems placed in pots of water in a cellar or cool place for at least one or two hours before packing. This gives the buds a chance to fill with water by absorption and prevents them from becoming "flabby" so quickly as when packed directly they are cut from the plants. The buds or blooms themselves should never be wet as they then quickly turn brown. The best material for packing is sphagnum moss, but if not to be had what is known as "Florida moss" will answer. Using a berry crate or box, place a little moss across the bottom at one end to support the buds of the first row, then place a light layer of moss over the stems, lay on the next row and continue until the box is full having a layer of moss over the stems of each row. The moss should be quite damp but not so wet that the water will run from the moss on to the flowers. The box should be packed so snug that the contents can not move about in shipment. If packed according to directions the flowers will lie in a slanting position, the bud being

at the highest point. Thin strips of oiled paper, above and below the buds only, would be an additional safe guard against the flowers turning yellow or becoming spotted by water standing on them. The buds stand transportation well when correctly cut and packed, and when they arrive in good condition sell well, but if poorly cut and packed they are absolutely worthless, hence the importance of starting right. Many commission men consider themselves lucky if they get the cost of express charges back on a lot of poorly cut and packed buds.

There are in New York a half dozen and in Chicago two commission men who sell exclusively consignments of cut flowers, and if you intend to ship send to them by all means rather than to a general produce commission man who knows but little as to the real market value of the flowers. If sent to the latter dealers the consignments are frequently jobbed out to "street fakirs" at ridiculously low prices, who peddle them on the streets for anything they can get and thus demoralize the market. Regular cut flower commission men have extensive ice boxes and cool cellars for preserving their stock and can thus equalize the fluctuating demand by holding such easily kept things as correctly cut and packed gardenias, but the produce commission man has not these facilities and sells at once for what he can get.

Southern papers will benefit their rural readers by inserting the above in their columns.

## White-Flowered Azaleas.

Azaleas may be divided into two classes, the deciduous hardy kinds, and the evergreen or greenhouse varieties, to which we here confine our remarks. They belong to the heathwort family, and are very closely allied to rhododendrons. Thanks to the persistent efforts of the florist and hybridiser, azaleas are now to be found of almost every shade of color, whilst they are extremely free flowering, and their blooms yield a delicate perfume. These qualities combined have led to their becoming universally popular, and they are now almost indispensable, not only to those who have accommodation for them as window plants, but also for those who grow them into enormous specimens for the embellishment of their large greenhouses and conservatories, and for public exhibition. With all this popularity, however, I have never heard a good English name for these Indian azaleas.

Azaleas are extremely free-flowering and ornamental, and they yield easily to the influence of artificial heat, so that with a little gentle forcing plants may be had in flower from Christmas to midsummer, if a sufficient stock can be kept to maintain the succession. Moreover, the plants that have been forced for a year or two will naturally produce their blooms earlier, and, therefore, these particular plants should be kept for the earliest bloomers, as very little forcing will be necessary. Those plants which have been forced should be kept in heat to finish their growth, and when this is completed, removed to the greenhouse, and afterwards to the open air, in order to thoroughly ripen their wood and set their buds for the next season, but those plants which have not been forced I prefer to grow in the open air, and if the plants are not too large and unwieldy planted out in the open. I am quite



CALCEOLARIA.

aware many disagree with this system, but I have never known anyone who has given it a fair trial to have anything to say against it. The advantages to be obtained by adopting this system of planting out azaleas are rich deep green foliage, entirely free from thrips, and with such an abundance of bloom as cannot be imagined by those who have only seen them under pot culture. It is true, however, that treated in this manner they do not increase in size so rapidly as those specimens grown under glass, because the growths made in a season are much shorter, but this is really an advantage to those having but limited space, at the same time the plants become very dense and compact. The only drawback I have found in practicing this system was that as the plants rooted so freely when lifted in the autumn, they required, after a season or two, a much larger pot than was compatible with the size of the plant. To obviate this I had the sides of the balls of earth scored and slightly reduced every year before planting them into their summer quarters, a plan which I found to answer admirably. These azaleas were not planted indiscriminately in the borders, but in properly prepared beds, and as the subsoil was sand no further drainage was necessary. The compost consisted of peat, loam, leaf-mold and sand, in the proportion of about three parts of the first and one each of the other ingredients. The plants were never allowed to become dry at the roots, and during dry weather the water was applied by means of a hose to the

foliage and roots every evening, and I have never seen cleaner or more handsome specimens, and none which could approach them for freedom of flowering. All growers have not the convenience, however, to carry out the planting-out system, but I strongly advocate growing the general collection of plants in the open air. In the first place, it produces foliage of such depth of color and cleanliness as is impossible to obtain under glass, even with great expenditure of labor and expense. The plants become well and regularly set with flower buds and not one-sided and gappy, as is often the case with indoor grown specimens. The plants should be set outdoors in an open space, so that the sun may shine upon them on all sides at some time in the day, and so arranged that each plant will shade its neighbor's pot. In order to prevent the pots becoming sufficiently heated to burn the roots, the outside row of pots should be surrounded by a low hedge or fence, which should not be higher than the pots, otherwise the bottom part of the plants may be deficient of bloom. In the autumn the plants should be housed before the frosts begin, and they should be kept cool and quiet, but not allowed to suffer from drought. An over-supply of moisture, however, is equally dangerous.

Azaleas are specially valuable for cut flowers, as they bear cutting with impunity. Azaleas are easily propagated from cuttings or by grafting. The latter process is the most usual, because many of the finer kinds are somewhat bad

growers upon their own roots, and derive much benefit by being grafted upon a strong growing stock.

The following comprise some of the very best white-flowered azaleas in cultivation:—

**DEUTSCHE PERLE** may be accepted as the very best double-flowered white variety in cultivation. It is a very early and free-blooming variety. The blooms in the bud state are very charming, resembling miniature rosebuds, whilst they in all stages are of the purest white.

**A. BORSIG**.—A variety of good form, very double and pure white.

**BERNARD ANDRE ALBA** is a compact-growing variety, and has a fine double flower.

**FLAG OF TRUCE**.—Flowers large, of good form and substance and very double.

**HELEN CARMICHAEL**.—A very large double pure white flower.

**IMBRICATA**.—This form is the most perfect double flower I know; it is, however, sometimes streaked with rose.

**LOUIS VON BADEN**.—One of the best single whites.

**MADELINE**.—Flowers very large, smooth, and of great substance, pure white and semi-double.

**MADAME CHARLES VAN ECKHAUTE**.—Very handsome, large, pure white, the flowers having crisped edges.

**MILÉ. MARIE LEFEVRE**.—An excellent form.

**MRS WRIGHT**.—A fine semi-double flower.

**PRINCESS ALICE**.—Finely formed pure white flowers.

**PRINCESS LOUISE**.—An exquisite double form of great substance.

**PUCELE DE GAND**.—A very fine pure single white variety.

**RAPHAEL**.—A fine, sweet-scented double white form.

**REINE DE PORTUGAL**.—A double form of great substance.

**ROSA BONHEUR**.—A superb large single white-flowered kind.

**SOUVENIR DE FRANÇOIS VERVAENE**.—A very large free-flowering form.—*W. H. G., in London Garden.*

[An engraving of *Azalea Deutsche Perle* appeared on page 279, February 1 issue of present volume.—*ED. A. F.*]

**STOCK PLANTS**.—Look out for your stock plants now. Label them "not for sale" before some ignorant assistant sells them, and see that they are not neglected in the rush of spring trade. Some inexperienced florists keep over old plants year after year for stock. Don't do it. Keep only young vigorous plants, but have plenty of them, and above all don't let their growth become checked by neglect. Give your stock plants the best places in the house. You can't expect healthy progeny from unhealthy parents.

**STORAGE ROOM**.—When you are rearranging your storage room this summer don't forget to provide a bin of liberal capacity for the storage of potting soil for winter use. Have the soil in a bin, under cover before November. Don't neglect it and then be obliged to thaw out lumps of soil during the winter when you run short. An additional smaller bin should also be arranged for to hold a supply of sand to use for propagating. These little arrangements cost only a trifle, but they save considerable labor and consequent expense if attended to at the proper time. If your storageroom for fuel is insufficient, be sure to enlarge it this summer. There are few florists who would make a mistake in doubling their present storage room.





Soil for Final Potting.

The time is fast approaching when the plants will require to be transferred to their flowering pots. The preparation of the soil for this final potting demands considerable attention where a large number of plants is grown, as it is unwise to delay the potting of the plants after they are quite ready and the pots well filled with roots. The soil should be of a good kind, but the best compost that can be obtained is useless unless the watering and general management afterwards are correct. It is a mistake to suppose that the soil must be prepared and stacked for six or twelve months previous to using it. No absolute rule can be laid down as to what mixture is the best, as soils differ so much in nature in various parts of the country. I will endeavor to make this part of the subject as clear as I can so as to suit various localities, just describing the different ingredients used.

Loam, as it is called, is composed of the top spit of an old pasture cut according to the depth of the fibrous roots of the grass. In some places it may be cut three inches deep, and in others one and one-half inches will be enough to obtain all the fibrous parts, as much depends upon the time the pasture has been laid down. It should be cut some time previous to using, just long enough for the grass to decay, but preserving the fibrous roots intact. Loam, as described, will form the staple of the compost, and in some districts is hardly obtainable of this quality. Many growers of chrysanthemums have to put up with a very inferior class of soil, and such men are, therefore, of necessity heavily handicapped as compared with those who have a large estate to select from. If the turf is light in character and cut from where the land is of a sandy nature, ground oyster shells should be added; but if the turf is taken from a district where chalk and limestone abound, oyster shells will not be needed, as the soil already contains too much lime for the welfare of the plants. My experience is that soil highly impregnated with lime is the worst that can be obtained for chrysanthemums. The foliage during the summer cannot be kept of such a deep green character as where the loam is composed of other chief parts. Charcoal is of great assistance in keeping the soil in the pots porous, and acting as a storehouse for ammonia. If the turf is of a retentive character the soil should be sifted to remove the finer portion, as this prevents a quick passage of the water when applied copiously. Those growers having a rather light soil at disposal are much more favored than those who have to depend upon soil which is of a clayey nature, and, consequently, much more retentive. The moisture does not escape so readily as it does when the compost is lighter in character; consequently feeding the plants afterwards cannot be so frequently and safely carried out as in the case of light and porous soils.

Manure is the ingredient second in importance and must be applied in some

form or other. Well-decomposed cow manure is often recommended. This is wrong, because what beneficial properties can there possibly be in entirely decomposed manure? It is the same with decomposed hotbed manure. I do not approve of cow manure in any shape being used with soils of a heavy nature. I consider it most injurious, being too close in nature and far too binding. The best manure is that prepared as if for a mushroom bed, shaking out more of the straw than would be required for the growth of mushrooms, and retaining little but the droppings. It is thus sweetened whilst most of the ammonia is retained. This is the best manure to employ for both heavy and light soils. Finely ground bones are better than half-inch bones, as the latter do not give out their manurial properties sufficiently during the short period in which the plants make their final growth and bloom. Dissolved bones are also beneficial when used in proper quantities. Soot is a powerful agent when cautiously applied, but when used excessively it has a most injurious effect upon the plants. I have seen plants which have lost all their leaves and others presenting a very sickly appearance through the misuse of soot.



LOW HOUSES

*A mule protest against low houses and those where stiff ventilator rods extend down into the walk.*

Lime in a quick state is useful for the destruction of worms, and every means should be taken to destroy these. The best time to add lime is when the soil is being prepared for potting, a handful occasionally during the operation being all that is required. I find this is the best method in order to destroy small worms in the soil. I would advise caution to be observed when applying lime to soils already charged with it, but for those of a sandy nature no harm will accrue through using the quantity advised. Some discretion should be exercised in the use of sand, as very little will be needed where the soil is of a sandy character; but when of a close retentive nature a liberal allowance should be added, which should be coarse and gritty. Clean, coarse silver sand is the best. Leaf-mold in a half-decayed state is an excellent ingredient to add, more especially in the case of heavy, retentive soils, as it is of great assistance in keeping the whole mass porous.

I will now give as nearly as I can the necessary quantity of the materials I have described. To be precise, I purpose taking the two cases in hand—heavy and light soils—and giving the details required in each composition. Taking first the case of heavy soils, I would advise as follows: Three parts of fibry loam broken up roughly, taking out the fine soil, one part of horse manure, one part of half-decayed leaves, one part of coarse silver sand, one part of charcoal and wood ashes, the former to be used in a rough state about the size of small walnuts, and one-fourth part of dissolved bones. Add a 6-inch potful of soot to every four bushels of soil.

Where the loam is light in texture, use four parts as fibry as possible, adding two parts of horse manure, one part of leaf-soil, half a part of coarse silver sand, the same quantity of ground oyster shells, half a part each of finely-crushed and dissolved bones, and the same quantity of soot as advised for the heavier soil. Thoroughly incorporate the various parts using all as roughly as possible. The action of mixing reduces the parts considerably; therefore, if the turfy loam and other ingredients be chopped small at first, the mass becomes too fine through frequent turning. Where the collection of plants is large and a quantity of soil is required, it is well to mix the compost at once for the whole, choosing a fine day. If done out of doors, protecting the soil from rains is necessary.

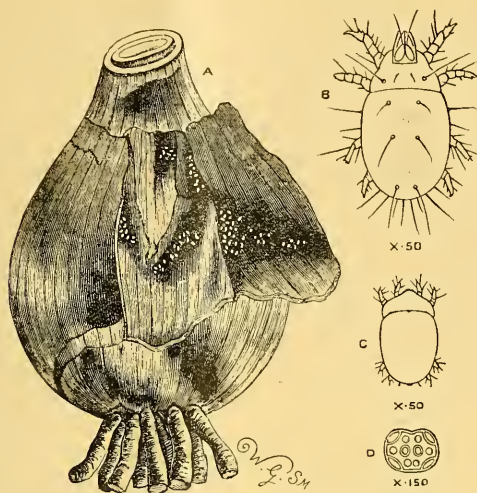
#### SHORT SEASONABLE NOTES.

As a reminder to chrysanthemum cultivators, I will jot down a few short seasonal notes of some of the details which require attention at the present time. At this busy season of the year chrysanthemums often get neglected when other work presses heavily. But these plants need considerable attention now if success is to be gained. Most growers decide about now the number of plants they purpose cultivating. Generally at the time the plants are receiving their third shift into 6½ inch pots any not required for growing on are planted out on any spare open piece of ground about two feet apart all ways. If these are restricted to about four branches they will produce useful cuttings early in August to furnish dwarf plants for flowering in small pots, one stem to each. At this time some varieties throw up suckers from the base of the plants. In the case of new or scarce sorts, such cuttings, if inserted singly in small pots, kept close in a cold frame and shaded from hot sun, quickly form roots, and if transferred to 6-inch pots finally and the growth is restricted to one stem they will produce a useful bloom upon each. Such plants will give an abundance of cuttings during next season.

Some of the plants which are restricted to one stem with the object of producing large blooms are now making what is known as the first break; the formation of the first flower bud causes new growths to start from each joint. When it is intended to allow the plants to grow in a somewhat natural manner—that is, to make their own breaks—the strongest of the growths at the point of each should be limited to three in number, removing the remainder. As the shoots grow, secure them loosely to a stake to guard against accident.

Good examples of the variety Eve and its sport Mabel Ward are very seldom seen. Where they can be had in good condition they are very telling on a stand. The best way to insure good flowers of these varieties is to grow the plants with one stem until the middle of May, then top them and select three of the best shoots. From these three branches rub off all side shoots as fast as they appear, and "take" the first buds produced, which are early crowns. Specimen plants will need attention now in topping the shoots as fast as necessary.

Standards will need attention where they make their first natural break before the desired height is obtained, in the restricting of the growths to a single stem until the latter becomes of the necessary height, removing all other side growths as they appear.



THE EUCHARIS BULB MITE.

Bush plants when required of large size should have the growths topped with the object of having the plants dwarf as well as large in diameter.

Insects—as green-fly, thrips and mildew—need constant watching and instant remedies to eradicate them before any harm is done.—*E. Molyneux in London Garden May 26.*

THE BLACK CHRYSANTHEMUM APHIS may be more easily exterminated than by the method described in last issue. Throw an armful of tobacco stems into a barrel of water and allow them to soak over night. Syringe the plants heavily with the tobacco water, and follow it up until you are certain that every insect has been killed. We find tobacco water of great value for other purposes as it is safer than fumigating. The water should be strained through a piece of gunny sacking before use and applied with a syringe. Verbenas, heliotropes and other soft stuff thoroughly enjoy a bath once a week; they will remain clean and healthy and appear to derive considerable nourishment from certain manurial properties in the substance. P.

GREEN FLY.—If green fly appears dip the tips of the shoots in a solution of soft soap and tobacco, an effectual remedy.—*Eurbridge on the Chrysanthemum.*

#### The Eucharis Bulb Mite.

For the past three years we have had a few bulbs of eucharis decay through the autumn and winter months, and in each instance I have found this little insect on the decayed bulbs and in the soil adhering thereto. It appears to me the mite attacks the bulbs when the soil in which they are growing remains wet for several days together. I think an average temperature of 50° during the dull months of the year is anything but a good one for the eucharis. This is the temperature our plants are in during the

period named above. To prevent the soil becoming too wet we have to water the plants very carefully, and by adhering strictly to this, I think we prevent the insects attacking more of our plants

A—Eucharis bulbs, natural size, showing mites.  
B—Mite enlarged fifty diameters; the male and the female are the same size, they differ a little underneath. Body colorless, legs very pale rose, with two brown spots on body.  
C—Hypopial form, enlarged fifty diameters.  
D—Suckers from underneath ditto, enlarged 150 diameters.

than they do at present. By what I have noticed for some time, I am of opinion that drought is detrimental to the mite. I do not wish anyone to think that we keep our eucharis on the verge of flagging to prevent the bulbs being attacked by the mite. Our aim is to keep the soil in which these plants are growing neither wet nor dry. Nothing will prevent the roots of the eucharis decaying if the soil is allowed to become dust dry, and is then saturated directly after. With these notes I forward a few decayed bulbs, with the insects on them.—*E., in Journal of Horticulture.*

#### Will a Rose Show in June Prove a Success?

[Read before the Florists' Club of Philadelphia by George C. Evans, June 5.]

It has been the custom for many years in England to have rose shows in nearly all of the prominent and in many of the smaller cities. They are usually held early in July, outdoor roses being in their prime at that time. From the glowing descriptions given by some who have been fortunate enough to be present at these rose shows, I can well imagine that no visit to the rarest collection of art could give nearly the amount of delight that has been yielded by these beautiful queens of nature, grouped tastefully by the careful hands of those offering them for competition.

I do not know whether an undeviating rule has been laid down with reference to the manner of exhibiting roses, at the

Crystal Palace shows, but I presume it must be the case, inasmuch as the many exhibitors presented their thousands of beautiful cut roses in a uniform style. Boxes about 18 x 24 inches are filled with fresh green moss in which were hidden small zinc receptacles, which would hold water, in which the stems of the roses are introduced. All specimens are named and being arranged artistically in regard to size and color, present a beautiful appearance. If I remember rightly six shillings admittance is charged to this show and the Crystal Palace was crowded with visitors. So great was the crowd upon the occasion to which I refer that to prevent confusion it was necessary to form the people in line, and it took a long time for one to pass down the long avenue past the tables upon which the roses were grouped and back again on the other side.

Reynolds Hole, in his book, speaks of the delightful influence these exhibitions have had with the working classes in some of the manufacturing districts. Money which might be spent in ways which would be demoralizing, is paid most willingly by poor men for fine new and expensive varieties of roses, not only with the idea of competing for and possibly winning the prize, but for the delight of gratifying the sense of beauty which is possessed so largely by the rose-lover.

True the English climate is better adapted for the culture of fine, outdoor roses than ours, but do we do the best we can? Are the pruning, the watering, the watching for and destroying of slugs and other enemies, the mulching and many other cares attended to as they should be? Under glass we all agree that dead leaves, mildew, red spider and other bad things reflect upon the gardener—that it is not necessary to have them. Can not unfavorable symptoms and circumstances be controlled out of doors as well, by proper and untiring attention? Is it not desirable from a business point of view that the planting of rose gardens in our country should be encouraged? What will do it so well as to have rose shows? The love for flowers is a universal one, and who does not love the rose best or all? If it were possible to duplicate here the rose shows of which I have spoken, the whole community rich and poor would deem no sacrifice too great to make to attend it, and would not be content till all their sisters and their cousins and their aunts came too.

I have referred in this paper entirely to the exhibiting of outdoor roses; but it is equally possible to have a creditable exhibit of roses from under glass. It surprises me very much to see in many greenhouses such utter neglect of plants when the spring months appear; it is too much trouble to build up the fires even if the thermometer does fall to a point which is decidedly unfavorable to the well being of the plants, and "why should we pull out the weeds now when in the course of a month or two we must replant?" False reasoning. Of course people do not want sick, poor roses, but there is always a sale for good ones, and we can have a fine collection to send to the June show, of indoor roses which in conjunction with the best we can do in outside varieties can not fail to soon help us up to the standard of our English cousins.

I understand that in our sister city Boston, the June rose show is the most successful one that they have during the year. Many people contribute to the show, generous prizes are given, and it always proves a success.



## Short Notes.

**THE GERANIUM.**—Who can tell us what it costs to grow and market 1,000 geraniums in 4-inch pots? Who can tell us the cost of growing and marketing 5,000 geraniums? If you have kept a record of expense, please send it in.

**NEW BEGONIA PENDULA.**—A colored plate, published by John Laing & Sons, the introducers of this novelty, represents a handsome plant growing in a basket, the plant covered with large pendulous blossoms of a bright rosy scarlet.

**NEW LAPAGERIA, NASH COURT VARIETY.**—This variety of *Lapageria rosea superba* is introduced by John Laing & Sons, London. The flowers measure four inches in length and are of a deep, rich color. The English horticultural press consider it to be a great advance over the old form.

**THE THIRTIETH ANNUAL REPORT** of the Missouri State Hort. society has been received from Secretary L. A. Goodman, Westport, Mo. It is a neat volume of 488 pages and contains the many interesting papers read at the meetings during the past year, together with the discussions on the same.

**LIGHT.**—What makes a new greenhouse so light? Simply because the glass is clean and the bars are newly painted. The size of bars and glass being equal, you can make that dark house just as light as the new one by a little labor and paint. You know the difference in value of a light house and a dark one. Need more be said?

**PACKING PLANTS.**—Shippers of plants will find "Excelsior" (commonly used for filling cheap mattresses) an excellent thing to pack around plants to keep them snug without bruising them. While fully answering all requirements it will not pack so tight as to exclude air—quite an important consideration in warm weather. Try it, the cost is slight.

**CARNATIONS.**—In reply to S. A. the distance at which the plants should be set from each other on the bench should be governed by the size of the plants. Ten to twelve inches each way is the usual distance. Carnations will do almost equally well in light or heavy soil if accorded treatment suited to the soil. Good drainage is necessary, and with heavy soils plenty of artificial drainage should be provided.

**BUILDING.**—Those who contemplate building new houses this summer would do well to refer to a paper on "Model Greenhouses and how to build them," read before the Philadelphia convention of the S. A. F. by John N. May, and to be found in the printed report of the society for 1886 at page 53. The paper is illustrated by diagrams in detail and a sectional view of a three-quarter span house drawn to a scale.

**PAINT.**—While building don't forget to paint the sash bars at least one coat before they are put on the house. Then your bar is protected where it lies on the center supports, a place where moisture is very apt to collect and rot ensue. If you want to do the job just right stand the ends of the bars (after being fitted) for an hour or so in a tub of linseed oil. Then you are protected at the weakest point of all. While the house is going up follow at once with the brush, and

throw paint on thick where joints will be made.

**HOT BED SASH.**—Now that the frames are cleared out, where are the sash which covered them? Are they carefully piled up under cover with thin strips of wood under each one to allow a little circulation of air between them, or are they lying scattered all over the place, standing on edge against the houses, frames or anything else which came handiest at the moment? A little care in piling up sash now will save much work in repairing later, for when lying around more or less glass is sure to be broken, and we don't know of any more disagreeable work than replacing broken lights of glass. Sash should never be exposed to the weather when not in use, and should never be piled up without strips of wood between them, as if placed close together moisture will surely accumulate there and rot the frames. Sash which are well taken care of will last enough longer than those which are neglected, to pay heavy interest for the small amount of time required.

## Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1887.

June 16.—Tem., morning 76°, noon 94°, evening 90°. Wind SW. Cleaned and trimmed foliage beds. Lined abutilon group with small vincas and libonias. Sowed in frameyard assortment of hollyhocks. Planted in frames cyclamens from pots. Planted small round beds with ricinus, cannas, caladiums, richardias and resedas.

17.—Tem. 70, 98, 90. SW. to W. Cleaned beds and frame yard. Tied tall plants.

18.—Tem. 75, 87, 80. NW. to SE. to S. Same as yesterday.

19.—Tem. 75, 85, 75. NW. to SE. Sunday.

20.—Tem. 75, 78, 67. SE. to NW. to S. Moved heavy tub plants in conservatory and washed the woodwork there. Repotted lot of small abutilons. Potted from boxes, where they had been picked out, small vincas.

21.—Tem. 67, 77, 75. W. Potted in frame yard vincas and celosias. Edged gladioli beds with resedas and antirrhinum beds with colens.

22.—Tem. 62, 75, 67. W. to NW. Divided and potted lot of *Alternanthera aurea*. Repotted tuberoses into 5-inch pots. Tied hollyhocks and cleaned beds.

23.—Tem. 59, 62, 61. NW. to SE. Same as yesterday.

24.—Tem. 61, 71, 67. S. to E. Continued trimming and cleaning various carpet beds.

25.—Tem. 63, 73, 70. E. Same as yesterday and repotted several large palms in conservatory.

26.—Tem. 70, 75, 68. NE. Sunday.

27.—Tem. 71, 73, 67. NE. Cleaned, hoed and trimmed foliage beds. Potted second lot of tuberoses—50 bulbs—for fall flowers. Cleaned and trimmed vases and stands.

28.—Tem. 68, 75, 74. NE. to E. Repotted and started poinsettias. Piled hotbed sash and shutters under cover for the summer. Divided and potted a lot of *Alternanthera aurea*. Staked and tied ricinus in foliage bed.

29.—Tem. 70, 83, 80. E. Same as yesterday.

30.—Tem. 80, 90, 80. S. to W. Same as yesterday and sowed another lot of hollyhocks. Repotted a lot of young yuccas.

## Replies to Queries.

**GINKGO BILOBA** (*Salisburia adiantifolia*)—This is perfectly hardy in central Illinois. There are many trees in the Middle and Eastern States, a foot and over in diameter of trunk, and forty or more feet high.

**COLOR OF "MOON FLOWER" SEED.**—The seed of *Ipomœa bona nox* are of a rather dark brown—not black. Before maturity they may be, and probably are, much lighter colored.

## Yellow Carnations.

A visit recently paid to Mr. E. S. Dodwell's garden at Oxford, was the means of discovering that he has a number of seedling yellow carnations, obtained from carefully made crosses, which can scarcely fail to produce some varieties of much merit. In 1886 Mr. Dodwell received from Mr. Gyles of Kilmurry House, Waterford, a fine batch of yellow, buff, and apricot seedlings, with markings of various hues and breadths, all very promising, and such as he expected would make a noise in the floricultural world when they came to be known. Mr. Dodwell had already utilized the pollen of a few of the best of the yellow carnations in Florence, making this fine variety the seed parent; and it has among the progeny several worthy to be grown with those obtained from Mr. Gyles. An important and most interesting feature of these seedlings is their distinct advance towards the longitudinal markings of the carnation.—*R. D., in Gardeners' Chronicle.*

## The Arrangement of Exhibitions.

We clip the following from the Boston *Transcript* as showing a view of this matter entertained by one who is wholly without the trade. While the average newspaper writer is decidedly not a competent critic of horticultural matters, the writer of this makes several points worthy of consideration:

It was suggested to the Listener, during a second visit to the chrysanthemum show, by a lady who is a thorough artist, that the culmination of beauty at these exhibitions has not by any means been reached, nor even touched, because the flowers are shown by individual exhibits and not with reference to combined harmony of color and character. The flowers are beautiful, but higgledy piggledy, and one color kills another. What chance has a bush laden with delicate purple flowers, or the drab, quaker-like blooms that one occasionally sees in this exhibition, to obtain its full meed of admiration after one's eyes have been filled and saturated with brilliant yellows or blood-like reds? The eyes which are most sensitive to colors often find that they remain upon the retina as if photographed there, and affect all other tints for a time. Why not, say after the flowers have been exhibited for one day in groups as furnished by the individual exhibitors, rearrange them with a view to their aesthetic effect in combinations, as the Japanese do in their own exhibitions. We should have a new delight in the flower shows if this were done.

## Your Fall Trade List.

Print your FALL TRADE LIST in the AMERICAN FLORIST. It will cost you less money and do you more good than to print and mail your list yourself. We will print and mail your list, in the columns of this paper, to 5,000 buyers for much less than the postage alone would cost you. A full page in the FLORIST costs only \$12 for one insertion. It would cost you twice that sum to get up a list of your own and mail it to 5,000 addresses. Think it over! We can save you money and secure you better results at the same time, for the FLORIST is preserved while your trade list otherwise mailed would rarely be kept on file. We will print

extra copies for you—from the type after being set—at a nominal rate if you wish extra ones to mail in response to requests. If half a page is large enough it will cost you but \$21 for the service.

### SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant ads. not admitted under this head.

**SITUATION WANTED**—By an Englishman, age 25; married; 11 years' experience in growing and propagating terms, and general floral supply. Best of references on application to THOMPSON, Central Nurseries, East Fair, Atlanta, Ga.

**SITUATION WANTED**—By a thorough plantman, S florist and propagator, competent in all branches of gardening, either private or commercial. Married. Best of references. Address PLANTSMAN, care A. W. Smith, Boggs Ave., 32 ward, Pittsburgh, Pa.

**SITUATION WANTED**—A German gardener and S florist with 14 years' experience; single; long experience of references, would like a situation around Chicago, private or commercial. Address W. WEIGEL, care Fred Schneider, Allica, N. Y.

**SITUATION WANTED**—By a middle-aged German, S gardener and florist, single, long experience. Best of references. Can come at once if particulars are given in answer. First-class private place preferred. Address FLOHIST, care National Hotel, Indianapolis, Ind.

**WANTED**—Three thousand feet of second-hand 4-inch greenhouse pipe in good condition. Address F. H. MOSES, Bucksport, Me.

**WANTED**—Two hundred Cockscomb plants; also Verschaffeltii and Golden Boudier Coleus. FRANK WHITNALL & Co., Milwaukee, Wis.

**WANTED**—A practical florist; single man who thoroughly understands growing roses and forcing bulbs. Address with references W. D., care Ed. B. Mumma, room 2 Callahan Block, Dayton, O.

**WANTED**—Florist to grow plants and cut flowers in a wholesale establishment containing 15,000 feet of glass. Reply with recommendations and prices including board. Single man preferred. E., care American Florist, Chicago.

**WANTED**—Greenhouse boiler. A second-hand Carnody or Allerton hot water boiler for greenhouse. State size, how long in use, present condition, and price. A. S. ESTERHOF, No. 30 East First St., Dayton, Ohio.

**WANTED**—A thoroughly competent man can have either a working or moneyed interest in a growing business. The business having grown too heavy for the lady owner. Must come well recommended. Address LADY FLORIST care Am. Florist.

**WANTED**—To rent or work on shares, a small forcing establishment. A place where there is a mixed business of cut flowers and plants preferred. Can furnish labor enough to work a place of 5,000 to 10,000 feet of glass. Address FLOHIST, box 465, Delaware, Ohio.

**FOR SALE OR RENT**—Four greenhouses in good central location, in a city of 10,000 inhabitants. For terms, address CHAS. A. BRUCKMAN, 230 N. State Street, Elgin, Ill.

**FOR SALE**—A greenhouse property in northern Indiana, with 2,000 square feet of glass, in a city of 10,000 inhabitants, natural gas. For further particulars address G. C. LANGE, Peru, Ind.

**FOR SALE**—Five greenhouses 150x20 and stock for cut flower growing, with or without lease of ground. Will be sold very cheap. Apply to F. F. CANDA, corner Lincoln and Sutter Aves., Chicago, Ill.

**FOR SALE**—The best retail florist's and seedsmen's business in the Northwest (population 150,000). Reason for selling, with full particulars furnished on application. Address BATA, care American Florist, Chicago.

**FOR SALE**—To settle the estate, 4 greenhouses—about 6,000 square feet of glass—3,000 heated, and 3,000 as cold frames; one acre of land. Grand railroad center, from which forty trains run to and from Boston daily. A good opening for the right man. Address Box 455, Ayer, Mass.

## New American Roses.

### *Freesia Refracta Alba* and *Leichtlinii*.

**ROSES** SOUVENIR OF WOOLTON and ANNIE COOK, 5-in. pots, \$5.00 per doz.; \$5.00 per 1-in. pots, \$3.00.

**FREESIA REFRACTA ALBA**, \$2.00 per hundred; \$15.00 per thousand.

**LEICHTLINII**, \$1.50 per hundred; \$12.00 per thousand.

Address **JOHN COOK, Florist,**  
BALTIMORE, MD.

**IMPORTER AND GROWER**  
**HYBRID PERPETUAL ROSES**  
**WILLIAM H. SPOONER,**  
Jamaica Plain, Boston, Mass.

1888.

## ROSES FOR FLORISTS.

We offer the largest and most complete stock of Roses in this country. Straight 2½-in. plants, propagated from thoroughly matured field grown plants, and grown in ordinary soil without manure or other stimulating material. They resist disease, start quickly, grow rapidly and give best results.

**ALL THE LEADING VARIETIES** in large supply at very reasonable prices—*Am. Beauty*, *Papa Gontier*, *Golden Pearl*, *W. F. Bennett*, *The Bride*, *Her Majesty*, *La France*, *Genl. Jacqu.*, *Perle des Jardins*, *Niphetos*, *C. Mermel*, *M. Robert*, *Pierre Guillot*, *Souv. d'un Ami*, *Sunset*, *Mad de Walville*, and hundreds of others.

**ALL THE LATEST NEW ROSES**—*Lucile*, *Mad. Etienne*, *Mad. Scipion Cochet*, *Mad. Claudine Perreau*, *Docteur Grail*, *Vicomtesse de Wautier*, *Baroness de Fonville* and all choicest varieties.

**HYDRANGEA GRANDIFLORA**—A Specialty.—Immense stock, strong, open ground plants, all sizes, very low. Also *Bisits Variegated Leaved Althea*, *Japan Judas*, *Japan Snow Ball* (*Viburnum plicatum*), *Japan Rose* (*Rosa Rugosa*), *Japanese Eulalia*, and a full line of all the best *Hardy Shrubbery* and *Climbing Vines*, including *Ampelopsis Veitchii* (*Boston Ivy*), *Akebia Quinata*, *The New Halliana*, and other *Sweet-Scented Honeysuckles*, etc., etc. *New Violets*, *Chrysanthemums*, and *Hardy Phlox*.

Special Wholesale Price List free on application to Florists, Market Gardeners and Dealers only. Lists priced, special selections made, correspondence solicited. Address

## THE DINGEE & CONARD CO.,

—: ROSE GROWERS, —:

WEST GROVE, Chester Co., PA.

## THE THREE B. B.'s.

BRIDE, BEAUTY,

BENNETT,

Still rank as the three best roses of recent introduction for forcing. Offer also

PAPA GONTIER,

PURITAN,

METEOR.

And all other new and standard varieties of Teas, Hybrid Teas, Hybrid Perpetuals, etc., etc. that are desirable for the trade, in extra fine plants at reasonable prices. I also offer for the first time

COLUMBIA (NEW 1888.)

A bedding rose of very superior merit. For description, prices, etc., write for Trade List to

JOHN N. MAY,

SUMMIT, NEW JERSEY.

## JAMES L. BOYSON,

CAEN, (CALVADOS) FRANCE.

1st Prize for Cut Blooms, Paris, May, 1887.

My CATALOGUE of the NEW

## EUROPEAN ROSES

will be ready January 1, 1888, and will be sent FREE on application.

A large stock of the last two years' varieties, as well as all the older kinds for sale.

Send for my complete Catalogue of over 1,200 varieties, with raisers' names and date of sending out

## — ROSES. —

## THE AMERICAN FLORIST COMPANY'S

# ::: DIRECTORY :::

OF

## FLORISTS, NURSERYMEN AND SEEDSMEN

OF THE

UNITED STATES AND CANADA.

1887.

PRICE ONE DOLLAR.

The most complete and accurate list yet published. The key designates the particular branch of the trade each one is engaged in. The street and number of those living in cities will insure the delivery of tons of catalogues which have hitherto remained dead in the office to which they were addressed. At this low price every one in the trade can afford to have a copy for reference. Address

## AMERICAN FLORIST CO.

54 LA SALLE ST., CHICAGO.

1888.

## NOVELTIES IN ROSES.

All the latest new varieties; also the leading forcing varieties Teas, Hybrid Teas and Hybrid Perpetuals.

Novelties in Chrysanthemums. Catalogue specialties at lowest rates.

Trade list now ready, mailed on application.

JACOB SCHULZ, LOUISVILLE, KY.

## 25,000 Forcing Roses for Florists,

	2½-inch pots.	Per 100
The Bride, Perle des Jardins, La France.....		\$ 4.00
Souv. d'un Ami, C. Mermel.....		4.00
Francis Bennett, Duke of Cornwall.....		10.00
Mad. Waterville, Etiole de Lyon, Malmaison.....		5.00
Somerset, Herminie.....		5.00
Adam Ten, Queen Scariot, Safford.....		4.00
Also 12 of the best new Chrysanthemums at.....		8.00

ED. MORAT, 719 Fourth Ave., Louisville, Ky.

E. BENARD,

ORLEANS, FRANCE.

ROSES ON THEIR OWN ROOTS

A SPECIALTY.

NURSERY STOCK OF ALL DESCRIPTIONS

For particulars apply to

E. BENARD, JR.,

P. O. Box 1400. San Diego, Cal.

## ROSES.

A Superb lot of LA FRANCE ROSES, in gills, half pints and one and a half pint pots, respectively

\$8.00, \$12.00, and \$25.00 per hundred.

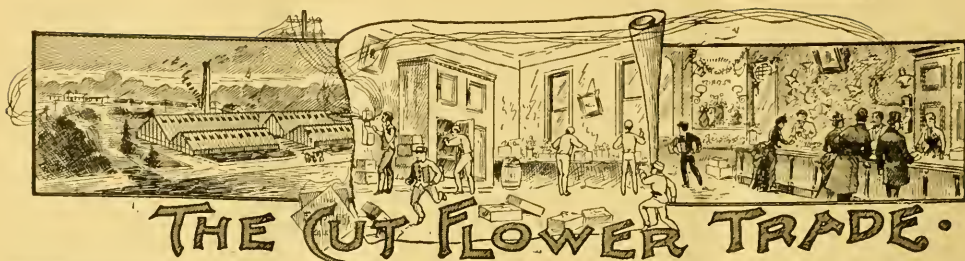
Also a few thousands of Bon Sieur, Papa Gontier, C. Mermel and Niphetos at same prices.

PERLE DES JARDINS ALL SOLD THIS SEASON.

Address J. KADLETZ,

P. O. Box 170. STAPLETON, STATEN ISLAND, N. Y.





### Boston.

A novelty exhibited recently at Horticultural Hall by C. F. Bryant, of Sharon, was a branching tulip bearing six fully developed flowers on a single stem.

The Rose and Strawberry exhibition of the Mass. Hort. society will take place on June 26 and 27. Premiums amounting to \$600 are offered for roses and other flowers, and \$400 for strawberries and early vegetables.

All the hardy plants, shrubs, etc., on the estate of the late C. M. Hovey have been sold at auction. Mr. Jas. Dennis also auctioned off recently his whole stock consisting mainly of bedding plants. This latter place was the property of the late John Hogan and twenty-five years ago was one of the leading establishments in this vicinity. Thus disappear two of the old landmarks in the florist business.

Died at Lowell, June 4th, of consumption, Edwin Sheppard, Jr., age 35 years. All those who know Mr. E. Sheppard, Sr., will sincerely sympathize with him in his great loss. Young Mr. Sheppard has been gradually failing for some time and his death was not unexpected. Like his brother who was carried off by the same disease a few years ago, he was a young man who had a host of warm friends and no enemies. He was passionately fond of his flowers and loved to linger among them as long as he was able to move about. He was beloved for his many good qualities by every one who knew him, and his pleasant welcome will be sadly missed from the old home at Lowell.

Mrs. H. H. Hunnewell who has been in poor health for some time died at Wellesley on Thursday June 7th. The azaleas and rhododendrons at this famous place are now in the height of their beauty. With his usual liberality Mr. Hunnewell has just got a magnificent collection of Indian azaleas arranged in a large tent, free to everybody, when Mrs. Hunnewell was taken alarmingly ill, and in consequence the tent was removed and the grounds closed to the public for the present.

The public garden has been more beautiful than ever this spring. The long continued cold weather was most favorable for the tulips and pansies, which form so large a part of the spring ornamentation of these grounds. A favorite mode of planting is to cover the bed between the tulips with pansies or myosotis. The effect of a group of scarlet tulips against a mass of white pansies, or of yellow tulips over a bed of myosotis, is very striking, while the almost endless shades of both tulips and pansies give a wide scope for artistic blending and contrasting of color. Some of the newer varieties of tulips were extremely gorgeous and the whole collection throughout was not

only first class as regards size and quality of the individual flowers, but was planned and planted with unusual care and Mr. Doogue deserves great credit for such a success.

The Garden Committee and other invited members of the Horticultural society visited recently the extensive grounds of John L. Gardner, Esq., at Brookline, which are in charge of Mr. C. M. Atkinson. After a most convincing experience of Mr. Atkinson's hospitality the visitors were conducted over the grounds and through the houses. Mr. Atkinson's azaleas are his especial pride and he certainly can show some wonderful specimens. A noticeable plant seen in one of the houses was *Gymnogramma schizophylla gloriosa*, a new and rare fern which makes one of the most beautiful basket plants imaginable. There were also many fine cattleyas and ericas in bloom. The collection of hardy herbaceous plants on this estate is very large. A specialty is made of *Iris Kæmpferi*, which is grown there to a perfection rarely equalled and not exceeded anywhere in the world. The blooms of this species shown by Mr. Atkinson have always taken first premiums at the exhibitions. A method of propagation by means of a perforated water pipe running the entire length of the bed, said to have been copied from that in use in Japan, is applied in the culture of these plants, with surprising results.

Mrs. J. Forstermann, representing Messrs. F. Sander & Co., of London, had an auction sale of orchids here on May 31st. Mr. Ed. Hatch handled the hammer. It was one of the most notable auction sales ever held in Boston and was attended by Mr. Kimball, of Rochester, Mr. Hicks Arnold, of New York, Mr. Robinson, representing F. L. Ames, Esq., Mrs. Dr. Kimball, of Lowell, Messrs. Fred Harris, David Allan, W. A. Manda, and other well known orchid fanciers. The gem of the collection was a tiny plant of *Cypripedium Fairieanum* which sold for \$240, this being the largest price ever realized by Messrs Sander & Co. at any auction sale in the United States. There are only five or six plants of this variety in this country. Another plant which brought a high price was *Cypripedium to grandis* which sold for \$32. This is a hybrid between *C. Lawrenceanum* and *C. argus* and is very scarce. A fine plant of *Cattleya exoniensis* brought \$105. This also is a hybrid. A very large bulbous distinct looking variety of *Odontoglossum Cervantesii* supposed to be a natural hybrid brought \$10.50. *Cypripedium albidum*, a rare hybrid between *Lawrenceanum* and *barbatum* brought \$19. A grand specimen of *Odontoglossum Phalaenopsis*, a special fine variety bearing upwards of forty flowers sold for \$37. *Cypripedium*

*Sallierii* (hybrid) brought \$12, and *Warrea bidentata*, offered for the first time in this country \$16. Many other scarce kinds brought good prices and Mr. Forstermann was well pleased with the returns.

W. J. S.

### Decoration Day at Boston.

Outdoor flowers were scarce and indoor flowers none too plenty, so prices were well up and firm. Those who accepted orders for large numbers of small bouquets at the price paid in former years could not have come out with much profit. The demand in general was about the same as last year, but amount of money spent for flowers probably considerably larger owing to higher prices. The use of small plants in lieu of flowers in decoration of graves has not increased here and is not likely to. The plants are well enough but cannot be said to take the place filled by flowers for such occasions. There is more sentiment in a handful of wild blossoms laid upon a grave than in a whole wagon load of bedding plants.

W. J. S.

### A National Flower.

The nomination of the trailing arbutus as the national flower of America has been declared a poor one owing to the fact that the flower is not common to all parts of the country. The objector nominates the pansy for the position.

### A Unique Tulip Show.

Since 1885 a display of late tulips has been made annually by P. H. Krelage & Son, at their nurseries in Haarlem, Holland. The tulips are planted in large beds, the various classes being kept together and all carefully labeled. When in bloom these beds are covered by large tents and are viewed by tulip fanciers, some of whom come from considerable distances for the purpose.

### Effective Advertising.

Messrs. Ludwig & Richter, Allegheny, Pa., secured some good advertising by planting several handsome beds of tulips in Riverside Park at the end of Sixth street bridge, and on a sloping bank so that it could be seen from a considerable distance, formed with hyacinths, the firm name in six foot letters. A bed in the form of a Maltese cross was planted with a center of red tulips the four divisions being planted with four other distinct colors. A photograph sent us shows the tulip beds and hyacinth letters in bloom.

ELGIN, ILL.—A hail storm recently did some damage to greenhouses here.

**THE AMERICAN FLORIST**

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 Cents a Line, Agate;  
1 inch, \$1.40; Column \$14.00.

Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per  
cent; 12 months, 20 per cent.  
No reduction made for large space.The Advertising Department of the AMERICAN  
FLORIST is for Florists, Seedsmen, and dealers in  
flowers pertaining to those lines ONLY. Please to  
remember it.

Orders for less than one-half inch space not accepted.

Advertisements for July 1st issue must  
REACH US by noon, June 25. Address.

THE AMERICAN FLORIST CO., Chicago.

**Catalogues Received.**John Laing & Sons, Forest Hill, Lon-  
don, England, plants; Herenden Mfg.  
Company, Geneva, N. Y., steam heaters  
for greenhouses; J. M. Thorburn & Co.,  
New York, seeds and bulbs.

CONVENTION SUPPLEMENT.—The  
AMERICAN FLORIST will publish a con-  
vention supplement to be mailed with the  
issue immediately preceding the meet-  
ing. It will contain a map of a sec-  
tion of New York city, showing the loca-  
tion of the convention and exhibition  
halls, hotels at which special rates have  
been secured, railroad depots, etc. Also  
the programme of the meeting, in addi-  
tion to many other notes of interest to  
those attending the convention. Space  
will also be allotted to cards of those who  
are exhibiting at the meeting and wish  
to call special attention to their exhibits,  
for which purpose the supplement will  
afford unequalled facilities, as it will be  
in the hands of each delegate before the  
meeting and in connection with other  
reference matter of value at the time.  
Rates for advertisements in the supple-  
ment will be the same as in the body of  
the paper. Send in your orders early,  
being careful to state that the adv. is for  
the supplement.

FLORISTS FROM THE WEST, SOUTH-  
WEST AND SOUTH as well as from the  
Northwest are cordially invited to come  
to Chicago and cool off preparatory to  
the New York trip. Chicago proved her-  
self a summer resort during our last con-  
vention and we are sure the St. Louis flor-  
ists especially would be glad to come  
this way, even though the distance is a  
little greater, and with their aid and the  
West and Northwest a fine train can cer-  
tainly be made up, and most advan-  
tageous rates secured for all delegates.

**Pennsylvania Horticultural Society.**

In addition to the very liberal cash  
premiums offered by this society for com-  
petition at the next chrysanthemum  
show, the following specials are offered:

CUT BLOOMS.—Wootton Prize—Gold  
medal, offered by Mrs. Geo. W. Childs,  
for 25 cut blooms; twenty-five varieties.  
Wilbur Prize—Silver cup. For 100 var-  
ieties cut blooms, three of a kind. Schaf-  
fer Prize—Silver cup offered by Miss  
Elizabeth Schaffer, 25 varieties, three of  
a kind.

PLANTS.—Red Leaf Prize—Silver cup  
offered by Mrs. Henzey, four varieties;  
yellow. Sunnyside Prize—Silver cup  
offered by Mrs. Joel J. Bailey, four plants  
(Chinese), four varieties. Record Prize  
—Silver cup offered by William M. Sing-  
lerly; six naturally grown plants. The  
Pembroke Prize—Silver cup offered by  
Mrs. Chas. Wheeler; four Japanese, four  
varieties.

**@Wholesale MaxKels.****Cut Flowers.**

Roses, Teas	\$1.00
" Niphetos, Mermels	1.00
" Perle, Sunel	6.00
" La France, Jacobs	8.00
" American Beauty	12.00
Carnations, short	.75
Carnations, long	1.00
Lily of the valley	4.00
Narcissus poeticus	2.00
Stocks, Shirea	1.00
Nigella	.25
Pansies	.25
Smilax	1.50
Adiantum	4.00
Candidums	6.00

**NEW YORK, June 9.**

Roses, Perles, Niphetos, Souvs	2.00	3.00
" Mermels, Brides, Cooks	5.00	6.00
" Bons, Genders	1.00	
" Jacobs	5.00	
" La France	6.00	10.00
" Am. Beauty and Hybrids	17.00	
Carnations	1.00	
Lily of the valley	4.00	
Gladioli	10.00	
Heliotrope	1.00	
Peonies	18.00	
Smilax	20.00	25.00
Asparagus	1.00	
Pansies	.25	

**CHICAGO, June 11.**

Roses, Perles, Niphetos	\$4.00	\$5.00
" Mermels, La France	5.00	6.00
" Bonnets, Dukes	6.00	
" Bons, Safranos	2.00	
" Am. Beauties	8.00	10.00
Carnations, short	1.00	1.25
Carnations, long	1.25	1.50
Smilax	20.00	
Callas	15.00	
Cape Jasmmines	2.00	3.00
Peonies	6.00	
Adiantum ferns	1.00	

**PHILADELPHIA, June 9.**

Roses, Bon Silence, Safrano	2.00	
" Mermets, Bonnets, Souvs	4.00	
" Perles, Niphetos	3.00	
" La France	5.00	
" Am. Beauty, Parlat	15.00	
" Cooks	10.00	
" Niels	8.00	
" Jacobs	5.00	10.00
" Brides	5.00	
Carnations	.50	1.00
Lily of the valley	5.00	
Callas	8.00	
Smilax	20.00	
Heliotrope	.50	

Flowers in good supply, demand light.

**WM. J. STEWART,  
Cut Flowers & Florists' Supplies****WHOLESALE**

67 BROMFIELD ST., BOSTON, MASS.

Mention American Florist.

**CUT FLOWERS AT WHOLESALE  
N. F. MCCARTHY & CO.  
WHOLESALE FLORISTS,**

63 Bromfield St., under Hort. Hall, Boston, Mass.

We have made large contracts with the best Rose  
growers about Boston to handle their entire stock  
this season. Our stock will consist of the Queen  
Bennett, Pierre Guillot, American Beauty, Mer-  
met, La France, Malmison, Cock, Bride, Niphetos,  
Perle, Am. Beauty, Webb and Grace Wilder plants,  
long stems; other flowers in variety. We shall have  
particularly large lot of Mermets. We price so  
that in sending to us when you fail to get them else-  
where you will feel reasonably sure of getting them.  
Unknown parties must give satisfactory reference  
or let us send C. O. D. Write for information.

Mention American Florist.

**CUT ROSES  
AT WHOLESALE.**

The only establishment in the West growing Roses  
exclusively. 20,000 square feet of glass devoted to  
the growth of the Rose. We cut, pack and ship the  
same day, thus enabling the consumers to get fresh  
Roses without being handled the second time. We  
ship Cut Roses all over the country with perfect  
safety.

Also all the leading varieties of young Rose plants  
for sale.**GARFIELD PARK ROSE CO.,**1688 West Madison Street,  
Corner St. Louis Avenue, CHICAGO.

Mention American Florist.

**Thos. Young, Jr., & Co.,****Wholesale Florists,**

INCORPORATED 1885,

20 W. 24th St., NEW YORK.

**W. S. ALLEN,****WHOLESALE DEALER IN CUT FLOWERS,**

36 EAST 23rd STREET, NEW YORK.

ESTABLISHED 1877.

Price List sent upon application.

**LaRoche & Stahl,****Florists & Commission Merchants**

—OF—

**CUT FLOWERS, PHILADELPHIA.**1237 Chestnut Street, Consignments Solicited. Special attention paid to  
shipping. Mention American Florist.**C. STRAUSS & Co.,**

TELEPHONE 977. WASHINGTON, D. C.

**WHOLESALE ROSE GROWERS  
AND DEALERS.****LARGE STOCK OF ALL THE NEW ROSES.**

Orders booked for young stock at special rates.

**HAMMOND & HUNTER,**

Wholesale dealers in

**Cut Flowers and Florists' Supplies**

51 West 30th Street, NEW YORK.

**WELCH BROS.,  
WHOLESALE FLORISTS,**

165 Tremont Street, BOSTON, MASS.

We make a specialty of shipping choice Roses and  
other flowers, carefully picked, to all points in  
Western and Middle States.  
Return Telegrams sent immediately when it  
is impossible to fill your order.

**KENNICOTT BROS.,****WHOLESALE FLORISTS.**

ALL CUT FLOWERS IN SEASON.

Write for price list. Consignments solicited.

27 Washington Street, CHICAGO.

**CUT FLOWERS**

The choicest Cut Flowers at lowest market rates  
shipped C. O. D. Telephone connection. Use A. F.  
Code when ordering by telegraph. For prices, etc.,  
Address,

J. L. DILLON, BLOOMSBURG, PA.

**N. STUDER,**

Anacostia P. O., Washington, D. C.

WHOLESALE

**Plant and Cut Flower Grower**

— ALL CUT FLOWERS IN SEASON. —

Write for price list.

10,000 Coleus, Yellow Alternantheras and Achyras  
thes from 2-inch pots, \$2.00 per 100.

5,000 Geraniums in good variety, from 4-inch pots  
\$5.00 per 100. Larger lots, special prices.



## ☉ Ke Seed Trade.

SEED TRADE ASSOCIATION.—William Meggat, president, Wethersfield, Conn.; Albert M. McCullough, secretary, Cincinnati, O.

### The Seedsmen's Convention.

As we go to press the seedsmen are discussing an interesting programme at their sixth annual convention at Chicago. In the way of entertainment the local committee will take their guests by carriages through Lincoln Park, one day, by rail to South Park the second day, and complete the programme with a banquet at the Hotel Richelieu the evening of the third day. Twelve new names were proposed for membership in the association.

Up to the morning of the 12th inst. the following seedsmen were at headquarters: Wm. Meggat, Albert McCullough, John Fottler, Jr., Geo. Crossman, F. E. Emerson, John Allan, Geo. S. Haskell, A. L. Don, D. I. Bushnell, James King, S. F. Leonard, J. C. Vaughan, F. W. Barteldes, A. B. Cleveland, E. W. Burt, G. H. Leahy, D. De Forest Ely, H. W. Johnson, Daniel DeCau, E. D. Adams, W. L. Langbridge, E. B. Clark, A. N. Clark, S. B. Weems, J. C. McCullough, Robert Livingston, H. C. Hingley, H. W. Wood, F. N. Lang, I. Tillinghast, O. W. Clark, John A. Brace, A. C. Briggs, James Vick, H. W. Salzer, A. D. Perry, J. G. Peppard, Alfred Henderson, H. A. Daacke, Wm. H. Maule, Chas. N. Page, Wm. Currie.

A Nebraska delegate who arrived early improved the time by quietly working up a boom for a new vegetable which originated in his state. It is described as a hybrid between the watermelon and the tomato, the fruit being so luscious as to instantly allay thirst "as quick as you break the skin." He was overheard earnestly recommending it to a Cincinnati seedsmen, declaring that if once introduced in that city its great thirst allaying properties would result in a reduced consumption of river water and other intoxicating beverages for which Cincinnati is peculiar. As the vegetable is seedless he is thinking of placing the wind on the market in sealed bottles, none genuine without portrait and facsimile of signature on the label.

Geo. S. Haskell has just returned from California.

T. A. Cox, of San Francisco, was in British Columbia June 1.

ORANGE JUDD is reported to have resigned his position with the *Prairie Farmer*.

R. J. TRUMBULL, of Trumbull & Beebe, San Francisco, has just made a trip through the East.

LOS ANGELES, CAL.—R. F. Steele, of the A. B. Cleveland Co., was quite seriously injured by a railroad collision in Arizona. After ten days rest in this city he left for San Francisco May 30.

### Shantung Cabbage.

(*Brassica chinensis*, L.)

In a letter dated April 21, 1887, Mr. George Hughes, late Commissioner of Customs at Chefoo, China, offered the Royal Gardens seeds of a cabbage which has long been in high repute in China, but which appears to be little, if at all, known in this country. Mr. Hughes stated: "I have just received from Chefoo, North China, a small packet of

Shantung cabbage seed, and I should like, if possible, to introduce this delicious cabbage into England. It grows in the north of China, is lettuce shaped, and weighs from five to eight pounds. When boiled it is nearly as good, if not quite, as sea-kale; eaten raw, in a salad, it is of so delicate a flavor that I know of no vegetable in England to approach it. It is an autumn cabbage, should be planted about eighteen inches apart, thrives best with moisture, and in Shantung is well watered every day; there the seed is sown in June. When nearly full grown it should be tied round, so as to give it a good white heart. If it can be acclimatised in this country it will be a great addition to our vegetables."

The seeds received at Kew, being few in number, were carefully cultivated. They were sown in a heated pit May 3, and in about a fortnight all had germinated. They were pricked off into boxes, and when large enough transferred to pots. They were kept in a cold frame until the beginning of June, when they were planted out in beds of rich soil about eighteen inches apart in the rows, and the same distance from row to row. About the middle of July the plants were tied up in the same way as Cos lettuce, and when well filled and blanched were cut for use. They were pronounced to be excellent. The seed ripened only sparingly, probably owing to the dry weather of last summer.

It is possible that this Chinese cabbage may prove a useful addition to English gardens. The kinds most highly esteemed at Pekin are those from the neighborhood of the little town of Ngansun. These are said to be reserved for the table of the Emperor. They are eaten either raw, in a salad, or cooked and seasoned with salt.—*Gardener's Chronicle*.

### An Editor Rebuked.

Our live stock editor, John M. Stahl, waxed wroth because somebody has insinuated that he doesn't know more than the law allows. But pray what does that signify? The editor of the *Flowerman* has frequently been called a fool, and what made it worse, it was proved!—*Western Flowerman*.

### Floral Fete at Florence, Italy.

A correspondent of the *Philadelphia Friends Intelligencer* writes thus from Florence in regard to the fete held in that city in the month of May:

Another circumstance connected with these fetes appeared to me remarkable. Among the proceedings was a flower show. Florence is the city of flowers, and deserves its name; never have we seen them so numerous and so fine and so abundant. In the markets and on stands along the streets cut flowers are for sale in wonderful quantities. We bought beautiful *Marchal Niel* roses half blown, at five cents of our money for twenty buds. Lily of the valley was in great baskets, perfuming the street; every spray bore ten or a dozen bells. A small handful cost five cents. The flower show in question was something new to us. Some thirty of the finest equestrian in the city were decked with flowers according to the taste of the owner; some had only a few garlands disposed over them, some were quite buried in flowers, and even the horses were covered. These carriages were the private equipages of the first citizens and highest nobility, who did not disdain to take their seats therein and parade for two hours along the main street. The flowers were supposed to be, and perhaps were, the products of their own gardens, (it was going to say conservatories, but all flowers grow here in the open air), and prizes were given for the best display. I noticed among the successful ones, the names of a prince and one or two dukes. The Florentine nobility had its origin in the wealth derived from trade and commerce, and not like the feudal nobility of the rest of Europe, in war and conquest. Their wealth came from the profits of fair trade, and

not from the produce of lands worked by serfs. And so it is said they have always recognized the tie that connects them with the people.

### The Labor Question.

With the increase of large commercial places throughout the country, many containing acres of glass and the necessity for strict economy in every detail to reduce the expense of production, a study of the question of the management of our help is certainly necessary, especially in view of the fact that many large places as well as small ones are woefully mismanaged in this respect. No body of men can move or work to best advantage without an efficient commander, one who commands the respect as well as the services of his subordinates. Unfortunately in many places the foreman is only a sort of half head, who has but little capability and who is expected to put in the bulk of his time in the propagating house, not having the time necessary to carefully watch every detail of the work in a place of any size.

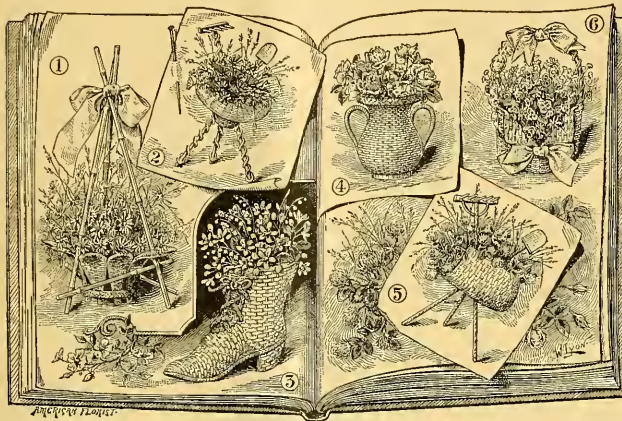
According to my idea this is all wrong. A foreman who has the superintendence of five men should have time—and be obliged—to take a trip through every house at least once an hour during the day, and know the exact condition of every foot of bench-room in them, working himself only to assist in some operation which is lagging and requires immediate attention. The foreman who has ten men under his charge should not be expected to put his hand to any work except possibly watering or in unusual emergencies, but all his time and skill should be devoted to careful inspection and supervision of the work of his men. He should be a man of keen observation, rather than an expert propagator. It is a maxim with most manufacturers that the best workmen do not always make the best foremen. The superintendent of a goodly range of greenhouses should be a man of intelligence, education and possessed of what is termed by business men "executive ability." This last is the greatest essential in the economical management of labor. Such a man will produce more good stuff from a given amount of glass with the assistance of two fairly qualified journeymen and three laborers than will five fairly qualified journeymen with a foreman who is obliged to spend the bulk of his time in the propagating house, and who lacks executive ability.

Men possessing this quality are not any too common and a man who does possess it is a valuable one. When you get one don't let him go. Pay him a good fair salary, he won't stay with you unless you do, for other avenues are always open to such men. When our help is managed on the principle outlined above, you will find more efficient and able men in the profession than now. As the case stands now there is but little to attract a young man of ambition to the profession, and except from love of the work, or from force of circumstances it is not frequent that men of ability and education do enter it.

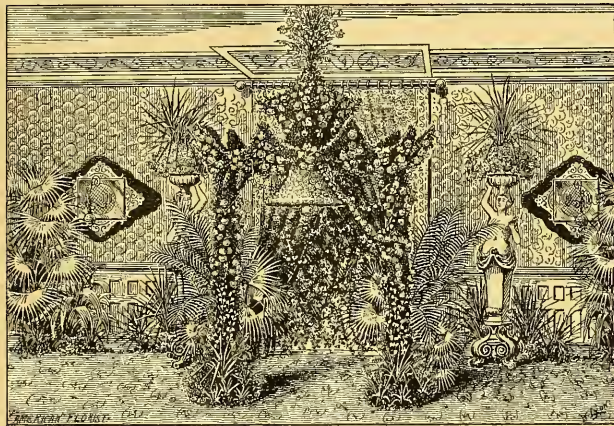
This principle of managing employees has been demonstrated by manufacturers, merchants and all business men to be the most productive of good results. No sentimental feelings enter into the matter. It has proved the best for the employer as well as the more intelligent of the employees, and it is the only one from which the best results will be attained in the management of labor, where there are five or more men employed in addition to the foreman.

G. L.

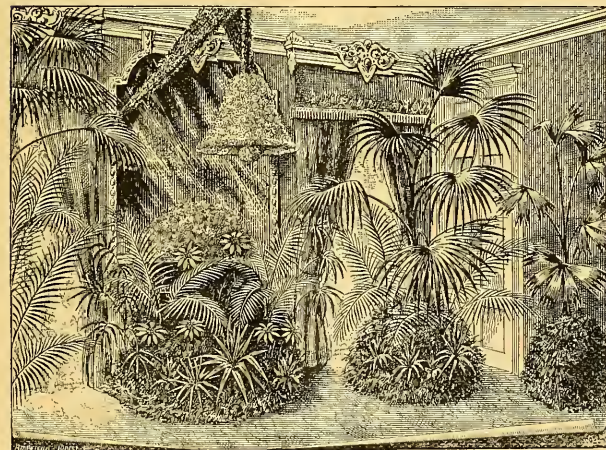




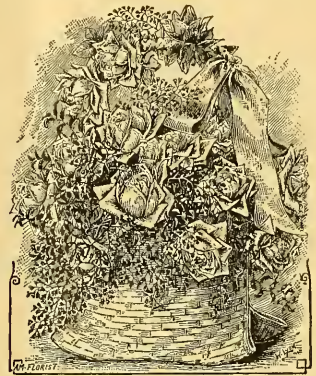
Floral Favors. Price \$4.50.



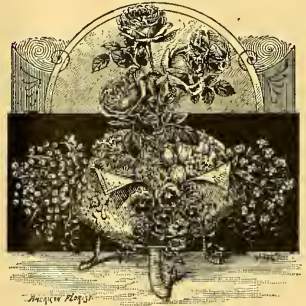
Wedding Decoration. Price \$4.50.



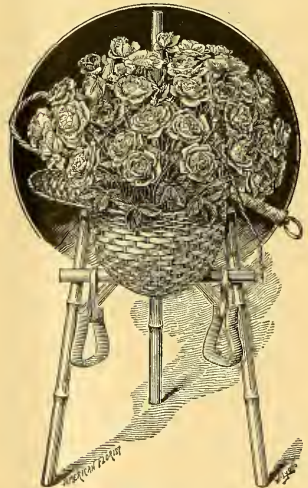
Wedding Decoration. Price \$4.50.



Basket. Price \$1.50.



Basket. Price \$1.50.



Price \$1.50.

Electrotypes of any of these cuts furnished at the prices quoted. They are all original engravings made for us.

**AMERICAN FLORIST CO.,**  
54 La Salle Street, CHICAGO.



## Chicago.

The spring plant trade has so far been very satisfactory.

Mr. Flint Kennicott, of Kennicott Bros., is on a trip among the trade in the northwest.

Mr. J. C. Vaughan has returned from a short trip to California, and now expects to sail from New York for Europe on the 20th inst.

James King has started an experimental ground of twelve acres at Elmhurst, to be used largely for summering over bulbs, raising a few kinds of seeds, etc.

The premium list for the second show of the local club to be held next November has been published. Copies may be secured on application to the secretary, 54 La Salle street.

The Decoration Day trade was much larger than ever before. The wholesalers report shipments as fully double those of last year at same time. There was a liberal supply of flowers, but all were used and more of some varieties could have been sold.

A hail storm smashed some little glass to the northwest of the city last week. A. H. Schneider at Oak Park lost all the glass on the west side of two houses. H. F. Redelings at Park Ridge also lost heavily, while A. Kennicott at The Grove, had a large portion of his crop of out door flowers, such as tulips, narcissi, etc., so badly cut to pieces as to make his loss a heavy one.

A challenge having been received from the Philadelphia and New York boys to play a game of base ball during the meeting at New York in August, the Chicago boys got a team together and recently indulged in a practice game which demonstrated the fact that further practice is highly desirable, not to say necessary. However, if the sun hadn't been in the west; if the grass hadn't been so green; if the ground had been a little smoother, and if Malsh hadn't slipped on a buffalo chip it would have been a good game.

The summer bedding at Lincoln and South Parks has nearly all been done. The leading novelty at South Park is a representation of a canoe race. Two canoes formed of othonnas each contain the upper part of the figure of a man wielding the paddle to win. The occupants of the canoes are of echeverias, the figures being a little larger than life size. Back of this group is a guide post some ten feet in height, formed of echeverias and between the arms sets an owl, also of echeverias, the post being lettered below "Hoo." Another design in echeverias is an armchair of large size, lettered "1888" on the back. The "Calendar" and "Sol's Clock" are planted much the same as last year. "The Mound" on Drexel boulevard is the same shape as last summer, the figures in echeverias and the ornamentation at the base being however quite different. At Lincoln Park the beds are principally of the geometrical style, nearly all quite different from those of last year. A bed of stocks of handsome shades of colors is now in bloom.

**HULSEBOSCH BROS.,**  
Dutch Bulb and Plant Growers,  
OVERVEEN, in HAARLEM, HOLLAND,  
SUPPLY THE TRADE.

Address for the United States, P. O. Box 3118 New York City. Wholesale Catalogue on application.

Mention American Florist.

## DUTCH BULBS!

G. V. VAN ZANTEN & CO.,

WHOLESALE BULB GROWERS,

Hillegom, Haarlem, Holland.

ESTABLISHED 1862.

Our stocks are selected with the greatest care for the American trade.

Price list free on application—before ordering write for one.

WRITE FOR

SPECIAL IMPORT OFFER

— ON ALL —

**FORCING BULBS**

IF NOT ALREADY RECEIVED.

LET US HAVE YOUR ORDER EARLY.

J. C. VAUGHAN,

146 & 148 W. Washington St., CHICAGO.

## TO THE JOBBING TRADE.

I HEREBY INFORM THE TRADE THAT

Mr. H. A. DAACKE, 22 Dey Street NEW YORK,

Is my sole Agent for the United States and Canada for the sale of my own grown

**DUTCH BULBS,**

Of whom Catalogues may be had upon application.

**B. J. LOMANS,**

✱ ✱ ✱ ✱ ✱ Haarlem, Holland.

**WE ARE NOW BOOKING ORDERS FOR**  
HYACINTHS, TULIPS, Single and Double NARCISSUS, Etc.  
**SEEDSMEN AND FLORISTS**

Importing direct should write us for prices. Special rates to large buyers. Largest stock of

Hyacinths, Tulips, Polyanthus, Single and Double Narcissus, Narcissus Bicolor  
Horsfieldi, Poets Ornatus, Trumpet Major, Double Von Sion.

**R. VAN DER SCHOOT & SON.**

Bulb Growers,

HILLEGOM, near Haarlem, HOLLAND.



TRADE MARK.

**POLMAN MOOY,**

HAARLEM,  
HOLLAND.

WHOLESALE GROWERS OF

**DUTCH BULBS.**

SEE OUR GENERAL LIST FOR NOVELTIES AND SPECIALTIES.

HEADQUARTERS FOR FORCING BULBS.

ESTABLISHED IN 1810.

**PRICES LOW.**

**DUTCH BULBS, ROMAN HYACINTHS,**

Lilium Candidum and Harrisii, Freesias, Paper White Narcissus, etc.

From the BOSKOP HOLLAND NURSERY ASSOCIATION, HARDY LOW BUDDED DWARF  
ROSES, TREE ROSES, RHODODENDRONS, Azaleas, Lilacs, Hydrangeas;

EXTRA STRONG CLEMATIS, ETC., ETC.

Catalogues for Fall importation now ready.

ADDRESS:

**C. H. JOOSTEN, Importer,**

3 Coenties Slip, NEW YORK.

**BULBS**

**WE ARE LARGE**  
IMPORTERS OF FORCING BULBS.

SEND YOUR LIST FOR PRICES.

**CURRIE BROS.,** SEEDSMEN AND FLORISTS,  
MILWAUKEE, WIS.

**ADVERTISE**

IN OUR  
CONVENTION SUPPLEMENT.

**AUGUST RÖLKER & SONS,**  
44 Dey St., NEW YORK,  
Supply the Trade with  
**SEEDS, BULBS,**  
And all kinds of  
**FLORISTS' SUPPLIES.**  
Revised Price List mailed on application.

**Bulbs, Immortelles, Etc.**  
**J. A. DE VEER,**  
(Formerly of DeVeer & Boomkamp.)  
183 Water St., New York.  
SOLE AGENT FOR  
THE GENERAL BULB CO., Vogelenzang, (Holland.)  
Ls. BREMOND FILS, Ollioules, (France.)

— A FEW CHOICE —

**GLADIOLI, DAHLIAS,**  
And Spring Bulbs left, at reduced prices.  
Full Catalogues now ready. Free to applicants  
in the trade.

**FORCING BULBS.**  
ROMANS AND DUTCH HYACINTHS,  
NARCISSUS, LILIUM HARRISII  
AND CANDIDUM, TULIPS,  
FREESIAS, ETC.  
Send for prices by the 100 or 1000. Special list will  
be ready in August.  
**A. GIDDINGS, DANVILLE ILL.**

## Summer Flowering BULBS.



Per 100  
Amaryllis Formosissima.....\$15 00  
Caladium Esculentum..... 6 00  
Cooperia Pedunculata..... 5 00

### GLADIOLUS

**CHOICE NAMED VARIETIES.**  
Our Selection..... 10 00  
Very good Standard named  
varieties..... 6 00  
Mixed Reds and Scarlets. 1 50  
" Pink and variegated 2 00  
" Whites and light  
shades..... 3 00  
" Yellows..... 4 00  
New American Hybrids  
mixed..... 2 00  
Good mixed, all shades.... 1 50

**HYACINTHUS CANDIDANS,**  
\$5.00 per hundred.  
**RICHARDIA (SPOTTED CALLA),**  
\$6.00 per hundred;  
Extra strong, \$10.00 per hundred

**MICHEL PLANT AND SEED CO.**  
718 Olive Street,  
ST. LOUIS, MO.

### PELARGONIUMS.

**GEN. TAYLOR.**—The best and most profitable  
for early market, starts blooming in ordinary cool  
greenhouse by middle of March; deep pink and  
very showy. Six fine bushy plants, 3 to 3½ in. pots,  
\$6.00 per 100; 4 to 4½ in. pots, \$8.00 per 100.  
**ANDREW MEYER, 3218 S. Jefferson St., St. Louis, Mo.**

WE ARE NOW PREPARED TO QUOTE PRICES ON  
**\* ALL FALL BULBS. \***  
FREESIAS and BERMUDA LILIES are Lower.  
*PRIMUM SEED from the best English grower at moderate prices.*  
**ALL SEASONABLE SEED FOR FLORISTS' USE  
TO MARKET GARDENERS.**

We can supply the finest strains of Cabbage Seed raised by Market Gardeners  
for their own use.

	Per lb.	Per oz.
"VANDERGARD."—The best White raised on Long Island . . . . .	\$10.00	\$1.00
"MARVIN'S SAVOY."—Very fine, sure ever-heading Savoy. . . . .	8.00	.75
"LONG ISLAND WAKEFIELD."—Very early and very large. . . . .	10.00	1.00
"WICKS' RED."—Our best and darkest, sure-heading red. . . . .		1.00

Cabbage Seed circular sent on application. Our full Wholesale Catalogue will be  
issued July 15.

All attending the Convention in August are cordially invited to visit us.

**V. M. HALLOCK & SON,**  
QUEENS, NEW YORK.

**F. E. McALLISTER,**

—WHOLESALE DEALER IN—

**Seeds** For the Florist Market, Garden-  
er and Farmer. **Requisites** Such as Baskets, Im-  
mortelles, Grasses, Mosses, Boquet Pa-  
pers, Pampas, Plumes, etc. **Bulbs** For the Green-  
house or Gar-  
den.

22 Dey Street, - - - NEW YORK.

**SEGERS BROTHERS,**  
GROWERS OF  
**HOLLAND BULBS.**  
OUR SPECIALTIES ARE:

Holland Hyacinths and Tulips, in any quantity; also Crocuses,  
Narcissus, Daffodils, Lilliums, Lily of the Valley, Gladiolus  
The Bride, Anemones, Ranunculus, Spiræa Japonica, etc.

References as to quality of our Bulbs, etc., to several United States Florists  
and Seedsmen.

Our Wholesale Catalogue is now Published.

PLEASE DO NOT DELAY TO SEND YOUR ORDER.

**LISSE. NEAR HAARLEM, HOLLAND.**  
WHOLESALE ONLY. NO AGENTS.



**BASKETS, BOUQUET PAPERS.**

Send for special list for School Commencements.

### FALL BULBS.

ORDERS TAKEN NOW FOR ROMAN HYACINTHS, LILY CANDI-  
DUM, LILY HARRISII, AND ALL FORCING BULBS.

ALSO FOR THE FULL LINE OF DUTCH BULBS.

**JAMES KING,**  
170 Lake St. CHICAGO.

## DUTCH HYACINTHS.

Our Wholesale Catalogue for the coming season of

**DUTCH HYACINTHS, TULIPS, NARCISSUS,**  
AND ALL OTHER BULBS AND BULBOUS ROOTS

Is now ready. Don't forget to forward a postal card if you want one, as there is a  
great reduction in prices of

*Hyacinths, Narcissus, Gladiolus, and other worth-growing Bulbs and Roots.*

**SEGERS & CO.,**

BULB GROWERS,

**LISSE, near HAARLEM, (Holland.)**



## Long Island Notes.

Louis Siebrecht, of East Hinsdale, was married last month.

The after effects of the blizzard were far more disastrous to some Long Island florists than the immediate damage to houses. At John Lewis Childs not only was the filling of orders stopped for nearly two weeks during the busiest of all months, but stuff in cold houses was frozen and the roofs of the houses broken in so that he was put back in his spring work to such an extent that it was the middle of May before he caught up with orders.

V. H. Hallowell & Son report about the same state of affairs. After the blizzard the roads were almost impassible, first from snow and then from mud. By using five horses on one wagon they could scarcely get their goods to New York. This firm is putting an addition of fifty feet to their bulb house to give more drying and cellar room.

As regards the spring plant sales, more chrysanthemums have been sold than ever before, contrary to expectations. The demand from retail trade being more than double, principally for either the cheap or very expensive sorts.

Clematis and Ampelopsis Viticella have been scarce around New York.

Moon flowers have had a wonderful sale again.

Good thrifty roses for mail or express have been scarce.

For retail trade "The Dinsmore" is destined to be very popular.

American Beauty has sold wonderfully. The Spritan could grow a good deal better and then not be a good grower.

At this date I have not seen so late a season as this for over fourteen years.

L. auratum has sold very cheap this season and must be a loss to many importers.

Keep your eye on tuberous rooted begonias for bedding; they are going way up, not in price, but favor.

Freesias will be very cheap this season. Why should so good a thing (without doubt one of the best house bulbs in cultivation) create so little enthusiasm?

That old standby—"so old," yet so good—Hydrangea paniculata has had an immense sale this spring. S.

## The Man Who Knows It All.

What a tiresome individual he is! Of course we refer to the man who *thinks* he does. He won't attend the meetings of the S. A. F. because he "can give pointers, and lots on 'em, to every man in it from the president down," and when you look over his little, dirty, wretchedly kept up, burlesques of greenhouses, and see what poor use he has made of his enormous fund of knowledge you feel as though you would like to take him out and give him a sulphur bath in the vain hope of getting some of the mildew and black spot off of him. He is intellectually hide-bound. You never find this man conducting a successful business. He always runs some mouldy, dropping to pieces place, and still he thinks he knows it all.

## VERBENAS A SPECIALTY.

Fine Stock in bloom and bud. Free from all disease.

	per 100 per 1000
From pots.....	\$ 2.50 \$20.00
Cuttings from pots.....	2.50 20.00
Plants, in bloom and bud.....	2.00 15.00

WM. DESMOND,

Henry Co. KEWANEE, ILL.

## ROEMER'S SUPERB PRIZE PANSIES.

The Finest Strain of Pansies in the World. *Introducer and Grower of all the leading Novelties.*

Catalogue free on application.

FRED. ROEMER, SEED GROWER.  
QUEDLINBURG, GERMANY.

THE BEST AND CHEAPEST  
DOUBLE PETUNIA SEED

(*P. hybrida grandiflora* fl. pl.)

In the market. For sale to the trade by the grower.

G. A. McTAVISH,  
NORTH SAANICH, B. C., CANADA.  
Mention American Florist.

## LAING'S BEGONIAS.

AWARDED FOUR GOLD MEDALS.

A Great  A Great  
Specialty. Specialty.

## JOHN LAING &amp; SONS

Cordially invite all Americans and Colonial friends visiting London during the summer months to come and see their grand collection of Single and Double

## BEGONIAS

Which for quality and quantity are unapproached by any other collection. Our fields and houses during the summer and autumn will be a sight never to be forgotten.

## DO NOT FAIL TO SEE THIS GRAND FLORAL DISPLAY

Best route to reach our Nurseries is from Charing Cross, Cannon Street, or London Bridge (30 minutes' ride) to Catford Bridge Station, thence a walk of 5 minutes. DESCRIPTIVE CATALOGUES POST FREE.

## JOHN LAING &amp; SONS,

Seed, Plant and Bulb Merchants,  
FOREST HILL, LONDON, ENGLAND.

Registered Telegraphic Address—Caladium, London.  
Mention American Florist.

## CHINESE PRIMROSE SEED.

The finest Primroses in the market. Plants of robust habit, and flowers unsurpassed in beauty.

TRADE PACKET containing 300 seeds, fresh and prime; 16 varieties; put up expressly for florists. Price \$1.00. Address orders to

HENRY S. RUPP & SONS, Shiremansdown, Pa.

NATAL, SOUTH AFRICA.  
BULBS, TUBERS, ROOTS.

A Wholesale Catalogue of select Native Plants cultivated by the undersigned is now ready, and will be forwarded free on application. Orders booked for spring delivery.

R. W. ADLAM, Maritzburg, Natal.

THE ILLUSTRATED  
Dictionary of Gardening

A Practical and Scientific Encyclopedia  
of Horticulture for Gardeners  
and Florists.

EDITED BY GEO. NICHOLSON,  
of the Royal Botanic Gardens, Kew, England.

A most valuable work of reference for florists and all interested in horticulture.

PRICE, for the set of seven handsomely bound volumes, \$21.00.

JAMES A. PENMAN,

12 Dey Street, NEW YORK.

Sole Agent for the United States and Canada.

Orders may also be addressed to the

AMERICAN FLORIST CO.,

54 La Salle Street, CHICAGO

## FORCING BULBS

FOR

Fall Delivery.

## NARCISSUS

AND OTHER

## FORCING BULBS

For Fall Delivery

All Good Flowering Bulbs.

OF NARCISSUS I SHALL HAVE ABOUT  
TWO MILLIONS READY FOR  
FALL DELIVERY.

Narcissus Albicans, the best of the single white

trumpets. Narcissus Bicolor Empress, the queen of the bi-

color daffodils, enormous flowers. Narcissus Bicolor Grandis, similar in color to

Horsfieldi, but having larger flowers and blooming later.

Narcissus Bicolor Horsfieldi, one of the largest and best for cutting.

Narcissus Bulbocodium, the Hoop Petticoat daffodil; very fine, strong bulbs.

Narcissus Bulbocodium Citrinus, like the yellow Hoop Petticoat, but with pale sulphur-yellow

flowers. Narcissus Golden Spur, very large deep yellow

flowers and early blooming; one of the best. Narcissus Henry Irving, one of the best deep

golden yellow trumpets. Narcissus Incomparabilis Eynosura, a beautiful

single Incomparabilis for cutting, yellow cup, divisions creamy white.

Narcissus Incomparabilis Stella, large single white variety, very early, fine for cutting.

Narcissus Major, true, one of the best forcing sorts, large yellow trumpet, similar to maxi-

mum. Narcissus Nobilis, a first-class variety for florists, free and early.

Narcissus Obvallaris, the true Tenley daffodil, one of the best varieties, forcing deep rich yellow

flowers of great substance. Narcissus Odorus Campanellae, the well-known

Campanelle jonquil, very strong bulbs. Narcissus Orange Phaenix, large double white

flowers with orange center, good for cutting. Narcissus Pallidus Praeox, the earliest of all;

forces very freely; single sulphur-colored trumpets.

Narcissus Poeticus Ornatus, the early white poet's Narcissus, the best of the Poeticus section for

forcing and for cutting. Narcissus Poeticus Plenus, the double white Narcissus.

Narcissus Princeps, one of the best forcing sorts; soft pale yellow trumpets.

Narcissus Rugulobus, true, large yellow trumpet, very free and very early.

Narcissus Scoticus, the Scotch Garland daffodil, a beautiful variety both for borders and for

forcing. Narcissus Von Sion, true, the double deep yellow daffodil.

And many other first-class sorts. List of varieties and price I should be happy to furnish on application.

Anemone Fulgens, true, fine strong English grown tubers.

Chionodoxa Luciliae, true, beautiful blue flowers in early spring.

Freesia Refracta Alba, one of the best modern plants for forcing, pure white, sweetly scented flowers.

I shall be happy to post prices of any of the above upon application.

## THOS. S. WARE,

HALE FARM NURSERIES,

Tottenham, London, England.

Prices good for fifteen days only.		Per 100
5,000	Geraniums, strong, 4-inch pots.....	\$4.00
5,000	" " " " " 6-inch pots.....	3.50
5,000	Coleus Verschaffeltii, Golden 3½-inch.....	2.50
5,000	Verbenas, Mammoth, &c.....	3.00
5,000	Fuchsias, extra strong, 4-inch.....	5.00
5,000	Panicle Geraniums, extra strong.....	5.00
5,000	Chrysanthemum, extra strong.....	5.00
500	Moon Flower, (true to name).....	4.00
100	Double Petunia, in variety, 5-inch.....	3.00
500	Azaleas, extra strong.....	5.00
500	Passiflora Constance Elliott.....	5.00
500	Feverfew, Little Gem, 3-inch.....	4.00
500	Salvias, 3 best sorts.....	3.00

**PAUL BUTZ & SON, New Castle, Pa.**

Address **N. S. GRIFFITH,**  
**JACKSON CO. INDEPENDENCE, MO.**  
(Independence is well located for shipping, being  
8 miles east of Kansas City.)



## News Notes.

ONEONTA, N. Y.—Decoration Day trade in cut flowers was a third larger than last year.

SAN DIEGO, CAL.—The flower festival closed the evening of May 12, having been a marked success in every respect.

LA CROSSE, WIS.—The Decoration Day trade was unusually large; fully double that of last year. All florists here report an increased trade in plants and cut flowers so far this year.

NEW ORLEANS.—The Floral Exhibition given under the auspices of a charitable organization has proved quite a success. Many fine displays were made by both professionals and amateurs.

HOBOKEN, N. J.—The dwelling and a portion of the greenhouses belonging to August Menne, a florist of North Bergen, were destroyed by fire May 20. Loss estimated at \$5,000, partly covered by insurance.

DAYTON, O.—The regular monthly meeting of the Montgomery County Hort. society occurred on the 6th inst. Vice President N. H. Albaugh read a short but very interesting paper entitled "Then and Now."

BROOKLYN, N. Y.—As regards the Decoration Day trade, I will say that my receipts have been the largest I have ever had, though some say that their sales were less than last year. The principal demand was for bouquets, wreaths and small blooming plants.

COLUMBUS, O.—The Franklin Park Floral Co.—Albert Knopf, president and manager, John Siebert, vice president, M. C. Lilley, secretary and treasurer—expect to be located in their new quarters at Pugh and Ridge avenues, about August 1. The new place contains about 10,000 feet of glass.

JANESVILLE, WIS.—Trade for Memorial Day and for one week previous was very much larger than last year. Demand mostly for bouquets and loose flowers. Lilies were the only outdoor flowers, consequently greenhouses were well emptied. Spring has been cold and backward, but everything growing well now.

HOUSTON, TEXAS.—Decoration Day opened here with a heavy rain which lasted till 1 p. m. The decorating was postponed to June 2, which was a beautiful day, but though there were a great many people out sales were small compared with last year. All the florists donated liberally, one firm giving ten baskets of flowers, ferns, etc.

BROOKLYN, N. Y.—A section of the penal code prohibiting the sale on Sunday of any property "except articles of food sold before 10 a. m., tobacco, fruit, confectionery, newspapers, medicines and surgical appliances," is being enforced and florists have been obliged to keep their stores closed all day Sunday accordingly. There is considerable indignation.

KANSAS CITY, MO.—The floral decorations at a banquet given to distinguished visitors from Georgia at the Coates House May 26, were the most elaborate ever seen in this city. Tropical plants were placed in the center of the tables at short intervals; these were the centers of mounds of plants and flowers which were connected by a scarf of plants and

flowers the whole length of the tables which was some 150 feet. The table was bordered with lilac fringed with ivy and white carnations while at each plate was a bunch of choice roses.

CINCINNATI.—H. W. Gardner, the Vine street florist, is having a lively time of it just now. An eastern firm recently secured judgment for about \$90 and a levy was made. The same afternoon Gardner filed a chattel mortgage in favor of the landlord to meet the claim for rent and since then another constable has appeared on the scene with an attachment from another party for a claim of about \$200.

LOUISVILLE, KY.—A flower show, lasting two weeks, will occur here in September. Premiums to the amount of \$5,000 will be offered, payment of the same being guaranteed by the business men of this city. The exhibition will undoubtedly help the florists and create a taste for plants and flowers. Parties from out of the city who will make a display, or send specimen plants may correspond with President Alfred A. Neuner, or Secretary H. Lichtfeld, of the State Florists society, at Louisville. A premium list will be published later in the season.

RICHMOND, VA.—May 30 was also Decoration Day for confederate dead in our city. Blue and gray jointly decorated national and confederate graves. How beautiful the custom and how much we should all encourage such dispositions. A most beautiful tribute made by Mr. Jno. R. Hooper was a large pillow made of Jacq and Mad. Planter roses in alternate rows from outer edge to white square in center with "Peace" lettered in purple. It was ordered by Col. James M. Whiticar of the Philadelphia Brigade and G. A. R. Post, and placed on the grave of the Confederate General, Geo. Pickett. Trade for the day far better than last year. Designs on wire predominating.

PARIS.—Florists are doing a roaring trade in clove pinks, which are selling at double their usual prices. The wonder is that they have not become even more costly, for they now possess for many Frenchmen a quite exceptional attraction and importance. They are no longer merely clove pinks—flowers with a certain form, color and smell. They represent a principle and a cult; they represent, in fact, Boulanger. The story goes that the General has adopted the clove pink for his emblem. Nobody knows why; nobody, probably, can even guess. And there is no reason why Boulangerists should not take the hint given by their organ, *La Cocarde*, and sport the clove pink as an outward and visible sign of their inward and spiritual feeling. The use of flowers for such a purpose is time honored and defensible. It flourishes in history, and will continue to flourish. Flowers are ready to hand, and they are, save in the case of the flamboyant varieties, personal adornments as well as significant indications of sentiment. They can be worn, too, by both sexes; and happy and fortunate is the cause which enlists on its side the sympathies of the ladies.—*New York Truth*.

BUFFALO, N. Y.—At the International Fair to be held here September 4-14 next, cash premiums to the amount of \$100,000 will be awarded.



**TRY DREER'S GARDEN SEEDS**  
Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free.  
**HENRY A. DREER, Philadelphia**

**PAPER SEED BAGS,**  
For Flower and Vegetable Seeds  
**CLARK BROTHERS, Manufacturers, 61 Ann St., N. Y.**

**SMILAX FOR EASTER**

IN QUANTITY FOR THE TRADE.  
**STORM KING FUCHSIA** Well rooted Cuttings, \$3.00 per 100, as good as pot plants.  
**FUCHSIA PHENOMINAL** \$6.00 per 100, or will exchange for Chrysanthemums and Geraniums of some varieties, and dbl. Abut. Thomps.

**F. E. FASSETT & BRO., Ashtabula, O.**

**ROSES FOR SALE.**

**LA FRANCE**, in 2 1/2-inch and 3 1/2-inch pots.  
**SOUV. DE L'AN AMI**, in 2 1/2-inch and 4-inch pots.  
**NIPHELOS**, 3-inch and 4-inch pots.  
**PAPA GONTIER**, in 3-inch and 4-inch pots.  
**PERLEES**, in 2 1/2-inch, 3-inch and 4-inch pots.  
**NEWMETTS**, in 2 1/2-inch pots.  
These plants have been grown in a cool temperature and are in the condition. Prices liberal. Discount on large orders.

**J. A. COSGROVE, Sparkill, Rockland Co. N. Y.**

**CABBAGE PLANTS.**

**EARLY WINNINGSTADT, FOTTLER'S BRUNSWICK, AND FLAT DUTCH.**

Fine plants, securely packed for shipment. 1,500 \$1.00; 10,000 \$12.00; 25,000 \$25.00.

**J. L. DILLON, Bloomsburg, Pa.**

2,000,000

**CABBAGE PLANTS NOW READY.**

All orders filled promptly at any distance.

**WE PACK LIGHT.**

All leading varieties, \$2.00 per thousand, 2,000 or more, at \$1.50 per thousand.

Special prices on large quantities and to dealers.

**TOMATO PLANTS**

Now Ready, at \$1.00 per hundred.

**CELERY PLANTS July 1st.**

Send for list FREE.

**G. R. CLARK & CO.**

SEEDSMEN, FLORISTS AND NURSERYMEN,  
**SCRANTON, PA.**

Mention American Florist.

**ROSES FOR FORCING.**

GROWN FROM THOROUGHLY RIPE NEW FIELD-GROWN PLANTS  
**LA FRANCE, MAD. DE WATTEVILLE, SUNSET, PAPA GONTIER, BRIDE, BON SILENE, MAGNA CHARTA, GEN. JACQUEMONT, AND OTHER POPULAR VARIETIES**  
IN LARGE SUPPLY. SEND YOUR LISTS AND HAVE THEM PRICED.

SPECIAL QUOTATIONS IN LARGE LOTS.

Address

**THE DINGEE & CONARD CO.,**

ROSE GROWERS, WEST GROVE, PA.

# ORCHIDS

## Cheap as Good Roses.

Send 2 two cent stamps for Catalogue and Plate.

**BRACKENRIDGE & CO.,** GOWANSTOWN, Md.

MANY ADDITIONS  
— TO MY —  
**ORCHID STOCK**  
this Spring. Send for Catalogue.

**WM. MATHEWS,**  
UTICA, N. Y.

# ORCHIDS.

Best and Largest Stock in New England to Cut.

CAPE COD PINK POND LILIES,  
AND ALL COLORS.  
Send for List.  
**BENJ. GREY,** Malden, Mass.

Ferns, Palms, Orchids  
FERNS FOR FLORISTS' PURPOSES,  
BY THE HUNDRED OR THOUSAND,  
**GEO. WITTBOLD,**  
Cor. School and Halsted Sts.,  
LAKE VIEW, CHICAGO.

**CHRYSANTHEMUMS.**  
We have a fine stock of the new French and English varieties. There are many exceptionally fine sorts in this collection.

\* **CHRYSANTHEMUMS** \*  
Our stock of the new varieties of last year is large and healthy. There is not a florist in the country who grows Chrysanthemums who can afford to be without them.

**CHRYSANTHEMUMS.**  
An exceedingly large and fine list of older varieties. Can supply too in 100 varieties; or by 1,000 or 10,000. PRICE VERY LOW.  
Address all orders to  
**W. P. SIMMONS & CO.**  
GENEVA, OHIO.

**CELERY PLANTS.**  
WHITE PLUME, PERFECTION HEART-  
WELL, NEW ROSE, GOLDEN  
HEART, GOLDEN DWARF.  
\$2.00 per thousand, in any desired quantity.  
SEASON BEGINS JUNE 1 AND EXTENDS TO JULY 20.  
**JOSEPH DUNKLEY,** Celery Grower,  
KALAMAZOO, MICH.

**SURPLUS TO EXCHANGE**  
For H. P. and Tea Roses, 2 1/2-in. pots.  
4,000 Finest Named Ranunculi, 2,000 Lualias,  
var. and zeb.; 500 Am. Sarinensis; 500 L. Cardi-  
dum; 20,000 A. Atamasco; 400 Cooperia Drum-  
mondii; 100 Iris Susiana; 100 Hemerocallis flava;  
100 Arundo donax var.; 400,000 Sets Ex. Pearl  
Tuberose, both extra large and medium. Ad-  
dress at once with offers,  
**MRS. J. S. R. THOMSON,** Spartanburg, S. C.

**HIGLEY'S TRADE LIST OF  
SEEDS, PLANTS, BULBS  
AND FLORISTS' REQUISITES**  
Now out. If you do not receive one, send  
for it. Address  
**HENRY G. HIGLEY,**  
CEDAR RAPIDS, IA.

**JOHN CURWEN, Jr.,**  
GENERAL  
GREENHOUSE STOCK AND ROSES.  
Villa Nova P. O., Delaware Co., Pa.  
Money Order Office: Bryn Mawr, Pa.

# ORCHIDS AND PALMS.

## NEW AND RARE PLANTS.

**RARE OFFERS:**  
6 Fine Orchid Plants, established and growing, all different, at \$10.00.  
12 " " " twelve distinct sorts . . . . . 20.00.  
Single plants of the Collection . . . . . 2.50.  
6 Palms, best varieties, fine plants . . . . . 5.00.  
12 " " and other choice foliage plants . . . . . 10.00.  
A PREMIUM WILL BE SENT WITH EVERY ORDER OF \$10.00 AND OVER

**SIEBRECHT & WADLEY,**  
409 Fifth Ave., NEW YORK.  
Large Collection of Orchids  
and Palms in America.

**YOU CAN'T** get better printing anywhere than I send you, and there are  
few places where as much practical knowledge of plants, bulbs, seeds  
and trees is stirred in with the printing. The mixture gives accurate,  
intelligent work in my specialty, which is printing for nurserymen, florists and  
seedsmen. Try me for anything you need. Good catalogues assured; lots of  
handsome cuts here.

**J. HORACE MCFARLAND,** Harrisburg, Pa.

Contracts made now for Fall Delivery 1888  
Japanese Lily Bulbs California Lily Bulbs  
Japanese Seeds, Caniers, Palms  
Trees, Shrubs, and Bamboos.  
**H. H. BERGER & CO.,** 315 & 317 Washington Street,  
SAN FRANCISCO, CALIFORNIA.  
Established 1878.

PLANTS, SEEDS AND BULBS  
**PINK & CO.**  
Postoffice Box 484,  
City of Mexico.  
Mention American Florist

**PRIMULA OBCONICA**  
IN QUANTITY.  
FINE, HEALTHY PLANTS.  
**PETER FISHER,**  
Montvale, Mass.

**SPECIAL LOW PRICES for JUNE**  
ROSES— Per 100 Per 1000  
Maidenhead, Sombreuil, Bride, Mad.  
Alex. Bernaix, Mermut, Safrano, Bon  
Silene, White Bon Silene, La Pactole,  
Mad. Camille, Compt. de La Barth and  
fifty other good varieties. . . . . \$ 4.00 \$30.00  
Geraniums, in 20 varieties, . . . . . 2.50  
P. Bismarck, Holly Wreath, L'Eleg-  
ante, Mad. Sallerol, Mt. of Snow. . . . . 3.00  
Rose Ger. Shrubland Pet. Mrs. Taylor. . . . . 2.50  
Heliotrope, 3 varieties. . . . . 2.00  
Fuchsias and Lantanas. . . . . 2.00  
Carnations, Sunrise, De Gray, Hinz's  
White, Petunia and Liliade. . . . . 2.00  
Alternanthera, 3 var. . . . . 2.00 18.00  
Chrysanthemums, 50 good varieties. . . . . 2.00 18.00  
Coleus in variety. . . . . 2.00 18.00  
Vincas, blooming var. . . . . 2.00 18.00  
Fuchsias, Constance Elliott, Florida  
Smithii, Tricascata. . . . . 3.00  
Double White Primroses. . . . . 15.00  
Bouvardia Leiantha, Flavesce. . . . . 3.00  
Honeysuckles, Halleana. . . . . 2.00  
Abutilons. . . . . 2.00  
Hydrangea Thos. Hogg. . . . . 4.00  
Fine stock of young Dahlias. . . . . 3.00  
Begonia Rubra. . . . . 3.00  
Ruberella and Semp. Gig. Rosea 1.00 per doz.  
List now ready and will be mailed on application.  
Address **GEO. THOMPSON & SONS,**  
LOUISVILLE, KY.  
Mention American Florist.

**FOR SALE.**  
30,000 FREESIA REFRACTA ALBA BULBS, and a  
limited quantity FREESIA LEICHTLINII MAJOR  
at \$22.50 per 1,000, delivered first week in July. A  
discount will be given on lots of 5,000.  
Young Roses will be partly taken in exchange, if  
sorts suit. Address  
**S. EDWARDS & SON,**  
BRIDGETON, Camb. Co., N. J.

FOR SALE. FALL DELIVERY.  
50,000  
**AZALEA INDICA AND CAMELLIAS.**  
For Catalogues, address  
**C. H. JOOSTEN,**  
Importer of Bulbs and Plants.  
3 Coenties Slip, NEW YORK.

Challenge of electric of plants, flowers, designs, etc., with 37  
and 58 supplements, 35 cts., with vegetable 50 cents which  
deduct from first order.

ENGRAVER FOR FLORISTS,  
PHILADELPHIA.

A. BLANC,



**FOR FLORISTS.**  
Coleus, 50 varieties. . . . . Per 100  
Geraniums, 4-inch pots, in bud. . . . . 10.00  
" " 2-inch pots. . . . . 4.00  
Roses, 4-inch pots, fine. . . . . 4.00  
" " 2-inch pots. . . . . 5.00  
Achyranthes, 2-inch pots, 5 varieties. . . . . 4.00  
Chrysanthemums, 2-inch pots, 40 var. . . . . 12.00  
Verbenas, 2-inch pots, 12 var. . . . . 3.00  
Lobelias, 2-inch pots. . . . . 4.00  
Golden Feverfew, 2-inch pots. . . . . 4.00  
Violets, Maria Louise, 2-inch pots. . . . . 4.00  
Carnations, 2-inch pots, 6 var., strong. . . . . 4.00  
Single Petunias, 2 1/2-inch pots, good var. . . . . 4.00  
Echeverias in boxes. . . . . 5.00  
Heliotropes, 2-inch pots, 8 var. . . . . 4.00  
Mixture, 4-inch pots, in bloom. . . . . 10.00  
The above stock in fine, healthy condition,  
and can be used for immediate sales. Any num-  
ber of plants may be taken at above quotations,  
provided you take nothing less than one dozen.

**GEO. W. MILLER,**  
WRIGHT'S GROVE, CHICAGO.  
Mention American Florist

**ADVERTISE IN  
— OUR —  
CONVENTION SUPPLEMENT.**



## Gathering Cape Flowers.

A correspondent of the San Francisco Chronicle sends from Paarl (Cape Colony) the following account of the manner in which "Cape flowers" are gathered:

The mountains known as the Drakenstein range, about fifty miles from Cape Town, is where the majority of everlasting flowers are procured. The Kafirs and their families gather them and bring them to the country storekeepers, who buy them by the measureful, which contains about one hundred, and for which they pay the Kafir one farthing. The storekeeper generally prepares himself for the flower season by making a rough drung-house, which is nothing more than a long shed about eight feet high and twenty-five feet wide, from the ceiling of which he suspends rows of string about one foot apart and which reach to the ground; he next ties the flowers into bundles of one hundred each, and then attaches two dozen or more of these bundles along the string from the ceiling to the floor. The warm wind passing through the shed dries these strings of flowers in a few days. Were they left to dry in the sun they would fall to pieces the moment they were roughly handled. When he has dried sufficient to fill a few cases, he sends them to Cape Town, where they are sold at auction along with other consignments, and are bought by the merchants, who ship them to England and America.

There are exported from the Cape Colony annually about 50,000 cases of everlasting flowers, valued at something like \$1,250,000, fully one-half of which are shipped to New York and Boston direct. This will give some idea of the enormous quantity that grow and the number of Kafirs engaged in gathering them.

The Kafirs who gather these flowers are those half-civilized fellows who live about the outskirts of the country villages. So soon as the winter rains are over the Kafir men begin polishing their old flintlock guns that they have bought by twelve months' labor—this is the usual way that the Boer pays his Kafir servant—and they and their families set off to the mountains to gather everlasting flowers. The women and children, however, have to do all the hard work, for "my lord" is too lazy to do any himself when he has a wife or two who must support him.

I may say here that the military authorities hold periodical sales of soldiers' worn out clothing, and as Jews are the only people who attend these sales, the clothes are sold almost for nothing, a few cents at most. They sell them again to the Kafirs, who are only too glad to buy some thing "racy," and it is a common sight to see a coal-black man with a soldier's red coat for his only covering.

I once saw a party start off on a flower gathering expedition, and they made such a comical scene that I am not likely soon to forget it. The old man was on horseback with a blue lawn-tennis cap on his head and a soldier's scarlet cloak on his back; his legs, I regret to say, he did not deem necessary to cover, and over his shoulder he carried his beloved gun. The women with the youngest children on their backs, and part of the household effects on their heads, trotted in single file behind the man on horseback, and kept up a constant chatter all the way. Their road lay along the most unfrequented paths and the poor children, dressed only in a ragged shirt, and more often in nothing at all, get their bodies and feet badly bruised and torn by the thorns and sharp stones they must travel over. There is one thorn bush in particular that is peculiar to South Africa, and is such a source of annoyance to the traveler that it is called the "Wachenhechri Bosch" or "Wait a bit Bush." It is a low-lying bush with long slender limbs covered with fine thorns which blow about in the breeze and have a peculiar way of reaching one and holding one too, unless you wish to have your clothing torn from your back. In many instances the women risk their lives in obtaining a few choice flowers, and frequently I have seen them on the verge of a precipice where few white men would dare to tread. At such times the women join hands and so enable the daring one to reach over and obtain the coveted flowers.

While the women are risking their lives in order to get the few choice flowers with which, and which the male Kafir will spend in the cheap wine of the country the moment he handles the coin, he is thoughtlessly riding here and there, with his pipe in his mouth, on the lookout for any game that may chance to come within easy range of his gun, for to his care is left the provision of the pot.

EDITH THOMAS says the anemone and golden-rod never meet, because they belong to different seasons. If Miss Thomas could see the pictures that come from the brushes of painters who paint job lots from the imagination, showing the pumpkin and strawberry blowing together, she would change her song.—Luck.



## FOR THE TRADE. FLORAL WIRE DESIGNS.

JAS. GRIFFITH,  
THE PIONEER MANUFACTURER IN THE WEST,  
305 Main Street, CINCINNATI, OHIO.  
SEND FOR WHOLESALE PRICE LIST.



### M. M. BAYERSDORFER & CO.

56 N. 4th St., Philadelphia, Pa.,

Manufacturers and Importers of

### BASKETS \* AND \* FLORISTS' \* SUPPLIES.

A large variety of Baskets for

### COMMENCEMENTS.

## Ed. JANSEN,

Manufacturer of

### NOVELTIES IN BASKETS

FOR FLORISTS.

124 WEST 19TH ST., NEW YORK.

SPRING STOCK NOW READY.

### Philadelphia Immortelle Design Co.,

904 Filbert St., Philadelphia, Pa.

For DESIGNS, WHEAT SHEAVES,

Immortelle Letters and Baskets,

SEND TRIAL ORDER.



ONLY POTTERY MAKING A SPECIALTY OF

## FLOWER POTS

### FOR FLORISTS.

THE WHILLDIN POTTERY CO.,

713 & 715 WHARTON ST.,

PHILADELPHIA.

## \* BARBED \* GLAZIER \* POINTS.

FOR SALE IN

BOSTON, MASS. . . . by Wm. J. STEWART,

67 Bromfield Street.

PROVIDENCE, R. I. . . . .

CHICAGO, ILL. . . . . J. C. VAUGHAN,

146 W. Washington Street.

Retail at 50c. per 1,000, 5,000 will be sent by Express free on receipt of \$2.50. PRINCERS, 50c. Each.

### B. B. CHANDLER,

Patentee and Manufacturer,

HYDE PARK, MASS., U. S. A.

Mention American Florist.

### OUR NEW TRADE

## DIRECTORY

Contains over

6,000 Names of (Live)

Florists, nurserymen and seedsmen, in the United States and Canada.

PRICE ONLY ONE DOLLAR.

AMERICAN FLORIST CO., Chicago.

ESTABLISHED, 1866.

## Floral Wire Designs,

Manufactured by

### N. STEFFENS,

335 East 21st Street, NEW YORK.



### Florist's Letters.

PATENT APPLIED FOR.  
These letters are made of the best Immortelles, wired on wood or metal frames with holes to insert toothpicks.

Prices on Wood Frames:  
21c. purple, . . . per 100, \$3.00  
2 1/2-in. . . . . 4.00  
Send for sample. Postage 10c. per 100. Script lettering on Metal Frames any word, se. per letter.

Designs, Monograms, Etc.

W. C. KIRCK,

1107 Broadway, Brooklyn,

New York.

M. M. Bayersdorfer & Co.,

Phila. Agents for Penna.

J. N. Yo. Agents for Ohio.

Ad. West of Pennsylvania.

## SYRACUSE POTTERY CO.

Ships Greenhouse Flower Pots to Maine, Florida, California and Texas—everywhere in crates only, but with no charge for crates or cartage. New and improved new revolving moulds turn out finest, smoothest and most perfectly finished pots in the market. No more rough pots. Send for full rules and prices of 20 sizes (handbook) packed to order. Our great cut in the prices of our

17 READY PACKED CRATES has given us an immense trade all over the South and West. No Pottery ships so far, so securely and so cheap as we do. Our new revolving machines finish pots finer than any hand-made pot, and we carry a big stock ready to ship the day the cash comes. No traveling men, no notes or accounts run at all. For prices see page 488 of last issue.

J. N. PERKINS, Manager, Syracuse, N. Y.

## D. C. SCHOFIELD,

—MANUFACTURER OF—

## Improved \* Greenhouse

## \* FLOWER POTS \*

NEW BRIGHTON, PA.,

Offers to the Trade the BEST

Quality of Improved Shoulder Pot

in the market at the

LOWEST PRICES EVER OFFERED.

SEND FOR PRICE LIST.

Orders will receive prompt and careful attention and satisfaction is warranted in every respect.

Delegates to the next convention will travel via the Pullman Car Line

TO AND FROM Louisville, Indianapolis, Cincinnati and the winter resorts of Florida and the South. For full information address

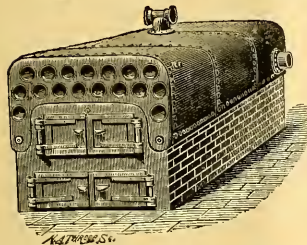
MONON ROUTE  
1219 N. LAUREL ST. CHICAGO, ILL.  
E. O. McCormick, Gen. Passenger Ag't, Chicago.

ESTABLISHED 1854.

**Devine's Boiler Works**

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers.



Capacity from 350 to 10,000 feet of four-inch pipe.  
Send for New List.

**PETER DEVINE,**  
387 S. CANAL ST.,  
CHICAGO.

**Ives' Putty Machine.**

Patented Jan. 8, 1887.

The best device ever invented for laying putty. With this you can make old leaky sash perfectly tight without removing the glass. It will do the work of five men in bedding glass.

Sent by Express on receipt of price, \$3.00.

**J. H. IVES, DANBURY, CONN.**

**HALES' MOLE TRAP**

For destroying ground moles in lawns, parks, gardens and cemeteries. The only PERFECT mole trap in existence. Guaranteed to catch moles where all other traps fail. Sold by seedsmen, Agricultural Implement and Hardware dealers, or sent by express on receipt of \$2.00 by **H. W. HALE, RIDGEWOOD N. J.**

**Conservatories**

GREENHOUSES, ETC.

Erected in any part of the U. S. or Canada  
Glazed on the

Helliwell Pat. Imperishable System

OR WITH PUTTY.

For further testimonials, illustrated catalogue or estimates address

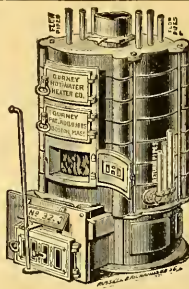
**JOSEPHUS PLENTY.**

HOPTICULTURAL AND SKYLIGHT WORKS.

Offices, 144 Pearl Street,

NEW YORK.

1100  
BED SASH  
VENTILATORS.  
WRITE FOR PRICES.  
FULL SIZE  
SASH  
OF  
PINE OR CYPRESS.  
WE CARRY  
A  
FULL STOCK  
OF  
12 14 and 16 foot lengths.  
JOHN L. DIEZ & CO.,  
530 No. Halsted  
Street,  
CHICAGO.



SECTION.

**GURNEY HOT-WATER HEATER**

FOR WARMING  
RESIDENCES, OFFICES, PUBLIC  
BUILDINGS, CONSERVATORIES, ETC.,

HOT-WATER CIRCULATION.  
Have you investigated the Gurney system of heating by Hot Water? If not, it will pay you to do so. Send for our Illustrated Descriptive Catalogue, free to all.

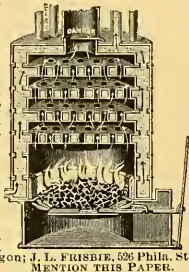
MANUFACTURED BY  
**GURNEY HOT WATER HEATER CO.**

OFFICE AND SHOWROOM:

237 Franklin Street, BOSTON, MASS.

SELLING AGENCIES—M. H. JOHNSON, 140 Centre St. N. Y.; RICE & WHITACRE MFG. CO., 42 & 44 W. Monroe St., Chicago, Ill.; T. R. CHASE, 51 Edmund Place, Detroit, Mich.; WILLIAM GARDNER & CO., Portland, Oregon; J. L. FRISBIE, 520 Phila. St., Covington, Ky.; VALK & MURDOCH, Charleston, S. C.

IT PAYS TO DO WORK EARLY.



ESTABLISHED 1853.

— THE —

**O. K. STEAM GENERATOR**

Is especially adapted to warming

GREENHOUSES, GRAPERIES  
AND CONSERVATORIES.

Special features insure

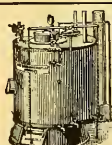
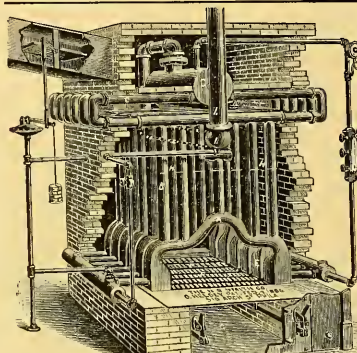
Economy, Simplicity, Durability,  
BURNS SOFT COAL OR WOOD,  
Giving best results with least labor and fuel.

SEND FOR DESCRIPTION.

**THE M. B. SMITH CO.,**

510 Arch Street, PHILADELPHIA, PA.

Mention American Florist.

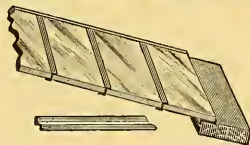
**Reduce your Coal Bills**

**THE FURMAN STEAM HEATER**  
ESPECIALLY ADAPTED FOR  
WARMING GREENHOUSES.

Give a most uniform heat night and day. Can be run with less attention, and a SAVING of fully 20 to 25 Per Cent. in Fuel over any other method. Burns HARD or SOFT COAL. Endorsed by leading florists. Send for full illustrated Catalogue. Address **HERDEEN MANUFACTURING CO., GENEVA, N. Y.**

IMPROVED GLAZING.

**J. M. Gasser's Patent Zinc Joints,**



For butting glass without laps; makes it air and water tight, saves fuel and cists. No breakage from frost. Also the best improved fuel oil Burners for steam boilers. Send for sample and price list.

**J. M. GASSER,**  
101 Euclid Avenue, CLEVELAND, O.

**SASH BARS**

VENTILATORS, RIDGES, GUTTERING  
AND LUMBER.

NO WIDE-AWAKE FLORIST need be told  
it will pay him to use Sash Bars, etc. made from

== CLEAR CYPRESS ==

Bars all Shapes up to 20 feet long.

Send for circulars and estimates.

**LOCKLAND LUMBER CO.,**

LOCKLAND, HAMILTON CO., OHIO.

**PIPE AND FITTINGS FURNISHED**

— TO —

PLANS AND SPECIFICATIONS.

Contracts solicited for

**HEATING GREENHOUSES.**

Most improved plans.

**ALL WORK GUARANTEED.**

Prices furnished on application.

**E. A. STIMSON & CO.,**

No. 22 and 24 Sears Street,

DAYTON, OHIO.

**GOLDMAN'S ATOMIZER**

FOR A THOUSAND AND ONE USES. COMMENT UNNECESSARY.



Practical  
and Useful.

You will  
not part  
with it.

For Flowers, Window Gardening, House Plants, Destroying Insects, and for various fine sprays. Most natural substitute for fog or dew. By dipping in water while closed, fills instantly. Ball instantly perforated; spray controlled by pressure of hand. Size of lemon squeezer. Weighs 5 oz. Exclusive Territory to Agents. Sells on its own merits; no talk. Sample by mail, 50 cts. This is the Atomizer that sold so well at the Danbury, Albany and other fairs. Florists and Seedsmen, show it to your customers; sells fast; good profit. Excellent for indoor plants. Send for illustrated pamphlet and price to the trade. Mention this paper.

**M. GOLDMUN, Manufacturer, Pittsfield, Mass.**



## Index to Advertisers.

Adlam, R. W.	508
Advertising Rates, etc.	503
Allen, W. S.	503
Bayerdorfer, M. M. & Co.	512
Benard, E.	501
Berger, H. H. & Co.	511
Blanc, A.	511
Boysen, Jas. H.	501
Bruckendice & Co.	511
Butz, Paul & Sons.	509
Clark, G. R. & Co.	510
Clark Bros.	510
Cook, J.	501
Congrave, J. A.	510
Currie Bros.	506
Curwen, John Jr.	511
Duckie, H. A.	508
Demond, Wm.	508
De Veer, J. A.	507
Devine, Peter.	513
Diez, John L. & Co.	513
Dillon, J. L.	508, 510
Dingee & Conard Co.	501, 510
Dreer, H. A.	510
Dunkley, Joseph.	511
Edwards, S. & Son.	511
Elliot, B. A. Co.	509
Fassett, F. E. & Son.	510
Fink & Co.	511
Fisher, Peter.	511
Garfield Park Rose Co.	503
Gasser, J. M.	512
Giddings, A.	512
Goldman, M.	513
Grey, Benj.	511
Grimb, Jas.	512
Grimm, N. S.	509
Gurney Hentch Co.	511
Haley, H. W.	513
Hallock, V. H. & Son.	507
Hammond, Benj.	509
Hammond & Hunter.	503
Henderson Mfg. Co.	513
Herr, Albert M.	509
Higley, Henry G.	511
Hitchings & Co.	514
Ives, J. H.	514
Hooker, H. M.	514
Hulsebosch Bros.	506
Hoson, Ed.	512
Joosten, C. H.	506, 511
Kadletz, J.	500
Kennicut Bros.	503
King, James.	507
Krick, W. C.	512

SAN FRANCISCO.—The rose show held under the auspices of the Woman's Exchange in May was considered worthy of columns of descriptive matter by the local dailies. Several very large collections of named cut roses were shown.

SYRACUSE, N. Y.—The spring plant trade has been unusually brisk, well grown plants finding ready buyers at good prices. A larger call for palms, baskets and vases is particularly noticeable. The chrysanthemum show which proved such a success last year will be repeated this fall.

## A Successful Agricultural Journal.

As an indication of progress and prosperity, we can announce with becoming modesty and pardonable pride, that about one year ago the present proprietors of the *Flowerman* had a rubber type outfit valued at 79 cents, and postage stamps to the amount of \$3.42. Now we can draw our check for \$75,000!

P. S.—And not a bank on earth will honor it.—*Western Flowerman*.

## GREENHOUSE HEATING AND VENTILATING.

Superior Hot Water Boilers.

JOHN A. SCOLLEY,

74 &amp; 76 Myrtle Ave., Brooklyn, N. Y.

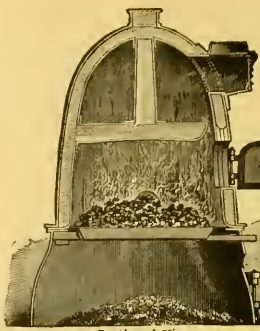
Send for Catalogue.

## GREENHOUSE HEATING.

BY A. B. FOWLER.

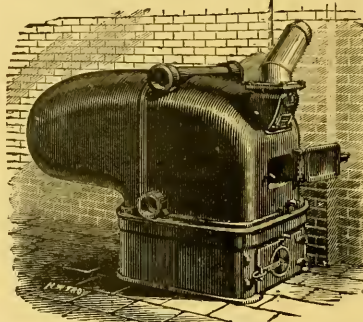
Explains fully all the best systems of heating greenhouses by both hot water and low-pressure steam. Tells you the points to consider in selecting an apparatus. How to adjust same to various locations; gives the results of the latest scientific experiments. Shows how to compute the heat and fuel of pipe required for a given space; draft and other important matters. It is highly recommended by Mr. John Thorpe and others. Postpaid, 5c.

Sent on receipt of price. Address,  
**AMERICAN FLORIST,**  
CHICAGO.



Sectional View.

# Greenhouse Heating AND Ventilating



Send 4 cents postage for Illustrated Catalogue.

# Improved Hot Water Boilers

For Heating

Greenhouses, Graperies,

CONSERVATORIES, ETC.

ALSO

Cast Iron Pipe, Fittings, Valves and  
all Material for Heating by  
Hot Water.

Send for Catalogue.

## MYERS & CO.

1173 So. 9th St.,

PHILADELPHIA.

## THE CELEBRATED WILKS WATER HEATER!

For Heating

GREENHOUSES,

DWELLINGS,

POULTRY HOUSES,

STORES, BATH TUBS,

ETC., ETC.

Send for Price List.

S. Wilks Mfg. Co.,

Cor. Monroe &amp; Clinton Sts., Chicago



ALL SIZES OF SINGLE AND DOUBLE THICK

## GLASS FOR GREENHOUSES.

ALL GLAZIERS' SUPPLIES.

Write for Latest Prices.  
Mention American Florist.

A SEMI-MONTHLY JOURNAL FOR THE PEOPLE

Vol. III. CHICAGO AND NEW YORK, JULY 1, 1888. No. 70.

EMILY LOUISE TAPLIN.





This new rose is attracting unusual attention both in England and on the continent. It is described by the raiser thus:—

"This new variety which is distinguished at first sight from all known varieties originated from crossing the Japanese *Rosa rugosa*, having single flowers of a rosy violet, with *Soumbril*, a tea variety with double white flowers. It is the first of a new class of Japanese hybrids which deserves the attention of all rose growers. The plant is of extraordinary vigor, always in vegetation and covered with flowers till frost. It is the first to commence and the last to stop blooming. The blooms are borne in clusters of six to twelve at the end of a stem. They are large, very open, half full and of a dazzling white, and exhale a very sweet and penetrating perfume. The foliage resembles that of the *rugosa* but has nevertheless been modified by the pollen parent. It is of a beautiful green upon the old branches while the young shoots are purple. The buds are sought for by florists. It is known that the *rugosa* rose resists the most rigorous cold and it is believed that this new variety can be cultivated in northern countries where the climate is too rigorous for other roses."

This novel variety was watched with great interest and when buds made their appearance they were scrutinized almost incessantly. It produces long pointed buds in clusters, not unlike *La Pactole* in shape and size, but the individual flower when open is quite similar to the old *Aimee Vibert* with the difference that the petals in the Bruant are much broader and of better texture. The foliage of this new comer strongly resembles the *rugosa*, but it shows evidence of having been quite materially modified by the tea blood which permeates it. The growth is distinct and very strong, making heavy canes or shoots, the leaves being set closely on the stem and showing ample size without being offensively coarse. Certainly Mr. Bruant deserves great credit for his exertions and doubtless this will be the starting point for a new race of perfectly hardy garden roses, which we are led to believe will withstand the rigors of our northern winters. The relentless propagator came along with his sharpened knife and lo! the glory of *Madam Georges Bruant* was cut short—but more anon regarding this interesting novelty. E. G. II.

#### Princess Beatrice.

I give below an extract from a recent letter from Henry Bennett.

"I am still more puzzled than ever at your failure with *Princess Beatrice*; it has been the 'rose of roses' here all the winter and spring; it is the easiest rose to cultivate under glass that I ever grew; it never mildews, is the freest from red spider and aphids of all roses. We have had the very worst season for growing

that I can recollect and this rose has stood it the best of all, though it has not occupied the best position; for cut flowers it has paid the best of all through the season. I only tried a few plants through the winter—these had been forcing since December 1, 1886 and on at it till now (May 14, 1888) without a rest, and they are at present producing splendid flowers—and have not lost a leaf—I can not get *Perles* to do this. I gave them a shift into larger pots in March of this year; this of course checked them a little, but they set to again, and I should only like you to see them now, they are a perfect picture of beauty. I showed 200 blooms cut from these plants and some small plants like those sent you and they were the admiration of all, and the judges awarded a special prize.

"A famous winter grower of roses near London bought six plants of it last year, and he was so pleased with it that he came over here some time since and bought 400 plants more of it; this is the largest sale that I have made of it to any one person on this side."

All the above is true, doubtless, from an English grower's standpoint, for no grower on this side, however badly disappointed in *Princess Beatrice* the past winter, will for a moment call in question a statement made by Mr. Bennett. Nevertheless, we think that *Beatrice* has been pronounced a total failure by all the winter forcers who have tried it; the facts in the case with us have been, that imported plants bedded in May, 1887, produced a magnificent show of bloom beginning early in September and ending promptly and squarely by December 15, after which date neither coaxing nor driving could rouse it from its winter's sleep. It came into magnificent bloom again in April, and, as Mr. Bennett says, is almost universally admired. While we have little hope left of its doing better in the winter we certainly believe it to be one of the finest teas for bedding yet introduced. Its color, freedom, fragrance, beauty of foliage and great freedom of growth will make it take a very high rank wherever the tea rose is used as a bedder. E. G. II.

#### Growing and Forcing *Cornelia Cook*.

(Reply to A. P. M., page 450)

With no cultural restraint this rose branches racemously (with an elongated primary axis and feeble laterals). Its terminal buds, from positional advantage, excite immoderate apical growths which sterilize the central and lower laterals. The havoc does not stop here for when these voracious terminals have reached their first period of active growth their leaves will have become so choked that they perform their functions languidly, the less-freely utilized root-sap accumulates and vascular turgidity arises, greatest in the lower portions of the stem, when gourmand shoots appear to complete the organic demoralization and frustrate the forcer's anticipations. The ordinary expedients of pruning present but a temporary and delusive remedy and add only to the pitiless waste. The plants of A. P. M. have reached the first stage and if their roots are active the second is impending and he modestly asks for advice. His real craving, undoubtedly, is to be told how to control the distribution and expenditure of the plant's resources so he may realize its total energy in florescence alone. Nature is a spendthrift in everything, and all our cultural anticipations hang on

our ability to divert her working energy into definite and economical channels. A plant is a community of living workers whose workshops are its cells. These tireless builders, when the work immediately before them is finished, are ready to move to that part of their community where the greatest facilities are presented for their labor. How to drive these plant builders into sections where their activity is needed we will presently explain.

My advice to A. P. M. is to pocket his pruning-knife or use it only in removing the dead, the debris and the incorrigible. His first effort will be to bring back the working life that has squandered so much material in constructing a useless mob of overgrowths to dominate and impoverish the rest of the plant system and supplant its warring structures by a cymose form of branching (having many and equal stems radiating from a common position, preferably the collar) so they may act concurrently and in the one purpose he has in view. This form of distribution of the plant's alimentation eliminates the most formidable obstacles to complete control of subsequent growths and enables him to replace each stem after blooming, speedily, surely and without shock to root-action. It now becomes possible to maintain uninterrupted root-activity, young and ever-vigorous foliage, perpetual youth and incessant florescence. His plants are not too old to submit to this transmutation and his first step will be to exterminate every bud on each plant (terminal and lateral) without injuring the leaves for they now become his sole reliance.

Having thus closed every avenue for expenditure, a vast supply of formative material rapidly accumulates and vascular turgidity arises which finds outlet in dormant buds that begin to push near the collar. A few well-placed ones must be selected to be grown into flowering stems, varying the number according to foliar extent and activity and others must be suppressed. These reserved buds quickly extend into strong shoots and before their terminal buds appear the foliar swarms of working cells on the primary stems will have begun to move with their reserves into the new growths, the leaves to lose color and the stems to show signs of impoverishment. They are now practically dead and may be removed. If either new member displays inordinate vigor it may be retarded by tying down or in extreme cases by partial defoliation until the laggards overtake it. Each shoot in this cymose array will bloom and when its flower has been cut its residual stem must be disbudded, one of its basal buds reserved, perhaps two, and the same replacing process continued until the roots become too cumbersome for bench accommodation.

Once this cymose method of branching, cropping and replacement has been adopted only the very indolent will be willing to return to the wasteful habit of sacrificing working life or the wayward one of *laissez faire*. CONNECTICUT.

[We much regret that the above is not couched in simpler language. As it is, some of our readers who have not a dictionary at their elbow will probably never know what they have missed.—E.D.]

#### Her Majesty.

I have just received from a lady patron of mine a fine specimen of the above rose. The plant was put out two years ago and has stood the last two winters with slight protection, and is now bloom-



HYBRID ROSE MADAME GEORGES BRUANT.

ing for the first time. It has still eleven strong well developed buds to open, and is entirely free from mildew, a fact that is quite refreshing to witness in this variety. I think it has at last found its proper place, viz : Among our best H. P. roses in the garden. THOS. FRANKS. Champaign, Ill.

#### Some New Roses.

Sappho, the new tea rose, so well exhibited by Messrs. William Paul & Son at the recent meetings of the Royal Hort. society, is a variety that can hardly fail to take a high position among the denizens of our rose gardens. The strong vigorous growth and handsome foliage indicate the excellent constitution of the plant, which is said to be of exceptional hardness, while the fact that every shoot of the numerous plants staged in the Temple Gardens was terminated by a handsome bloom is good evidence of

the free-flowering nature of the variety. The flowers are large, very full, built up high in the center, and of a tawny yellow or buff color, something in the way of those of Madame Berard, although more refined in form than is generally the case with the blooms of that rose or Gloire de Dijon; and few of the new roses as yet seen appear likely to be of greater general value than the so-called hardy tea rose Sappho.

The good first impression made by Madame Hoste (Guillot) was more than confirmed by the fine blooms on the handsome plants exhibited at the meeting of the Royal Hort. society, where it was awarded a first-class certificate. The flower is not unlike a pale yellow Innocente Pirola, having large petals and a pointed center, and is well carried on the vigorous plant. There is always room for another good yellow rose, and, given freedom and hardness in equal measure with its already witnessed vigor

and beauty, there is little fear of Mme. Hoste failing to maintain the high reputation of its celebrated raiser.

Madame Georges Bruant (Bruant) answers its description as a semi-double white hybrid rugosa, but it can hardly be said that the expanded flowers are so beautiful as those of the single Rosa rugosa alba. They may be more enduring on the plant, and the variety is of interest as the possible precursor of a new race of garden roses, but the blooms are flat and greatly lacking in quality, and though the variety is an unquestionable rugosa, and consequently of immense vigor and (presumable) hardness, it is doubtful whether it will attain very wide popularity.

Gloire de Margottin, the brilliant red hybrid perpetual sent out by Margottin, is most attractive in form and color, especially in the half expanded state. It still remains to be seen whether it may not be too thin for out of doors in a hot season; but the excitability of the plant, that is to say the readiness with which it may be forced, and the brilliance of the color of the forced flowers, which are well finished and of good depth, are qualities which will probably render the variety invaluable to growers for the cut flower market. So many otherwise bright red roses lose their brilliance when forced, and appear more dull in tint than when grown out of doors, but in Gloire de Margottin a rose seems to have been found with which this is not the case.

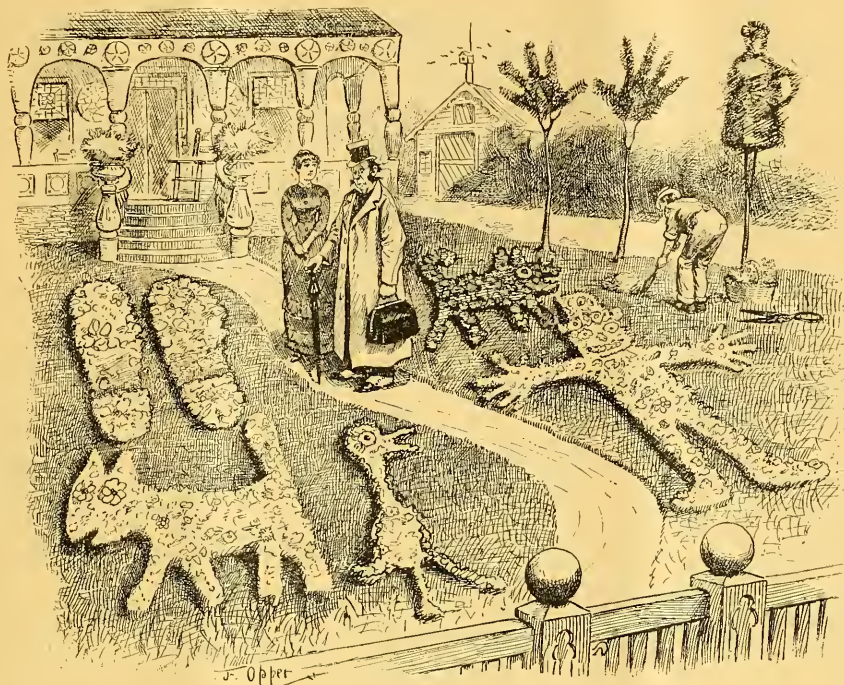
To the ever-blooming dwarf polyantha roses several additions are made this year, all more or less attractive. Gloire des Polyanthas (Guillot), to which a first-class certificate was awarded by the Royal Hort. society, may be described as a much improved Mignonette, being very free, with immense trusses of bright rosy flowers. Georges Pernet (Ducher) is a very dwarf, though vigorous variety, with exceedingly pretty and well-formed little flowers of a fresh rosy peach color, shaded with yellow; quite distinct. Golden Fairy (Bennett) also received a first-class certificate from the Royal Hort. society, and appears to be in color a good deal in the way of Perle d'Or, although stronger than that variety in habit and with a larger truss; the flowers not infrequently, like those of the Noisette William Allen Richardson, instead of being orange or tawny yellow throughout, have pale or even white edges. Little Dot (Bennett) bears a considerable family likeness to Golden Fairy in habit, but its well-formed little flowers are of a decided rosy pink color with a deeper shade, and, so far as can be judged at present, they are a good deal neater and better finished, that is to say, with less rough, uneven edges than those of any other variety of their color.

The Fairy China Rose, Red Pet (Parker and Paul and Son), has been a good deal seen and commented on, but there is no doubt about the brightness of its crimson color, nor about the increasing freedom with which it blooms, and it is one of those roses of which a good bed or mass would produce a brilliant and telling effect throughout the season.—T. W. G. in London Garden.

TEA ROSE MME. JOSEPH GODIER.—A colored plate of this novelty appears in the Journal des Roses for June. As shown in the plate the blooms are of good size, golden yellow with carmine center, outer petals tinted with coppery rose. It was obtained by M. Pernet fils-Ducher, Lyon, France.







A GLAD SURPRISE

During her husband's absence on a business trip, dear little Mrs. Childers employed a landscape gardener, who was recommended as being a "perfect artist." He had almost completed his work on Mr. C.'s return.—*Puck*.

### Seasonable Work.

Proper attention to all necessary repairs about the greenhouses is now in order; as the houses are emptied they ought to receive a thorough overhauling and cleaning, let all benches and shelving be put in proper condition to stand the tear and wear of another season, giving a good coat of whitewash to such parts of the house as are not protected by paint. Where the time-honored brick flue is in use they should be carefully gone over, repaired and cleaned, there is no end of "fixing" to be done about a florist's place at this season of the year, and the thrifty ones will always see to it, that necessary repairs are not postponed to the last moment.

Primulas and cinerarias for early use will now be growing on. Keep them repotted as they require it, giving them a cool place close to the glass, abundance of air and shading from strong sun. A cold frame is the best place for them, as the sash may be taken off altogether in cloudy dry weather; as a matter of fact I keep nothing indoors during the summer months, large plants are grouped in suitable positions outside, while orchids, ferns, etc. are kept in the cold frames and pits. I give ferns a position in which they are exposed to the sun during a great part of the day, merely protecting them from heavy rains. Orchids are shaded only sufficient to keep them from burning.

A sowing of pansies may be made about this time, and such stove or greenhouse plants as require potting should be attended to at once. Chrysanthemums propagated early in the spring ought now to be shifted for the last time, those struck later being kept shifted on as necessary; it is best to keep chrysanthemums and all such like stock plunged to the rim of the pots in any convenient material, by so doing much labor in watering will be saved. But I bethink me that an exhaustive list of seasonable operations would occupy more time in its preparation than I have to spare. Every reader of the *FLORIST* knows for himself the work that is most pressing upon him and it is only those accomplishing most during the next thirty days towards getting their affairs into good shape—who can best appreciate and enjoy the next annual convention of the S. A. F. A. W. M.

### Pansies Again.

In reply to Mr. Roemer's complaint that his pansies did not get a fair trial, I will answer him that I am well posted as to their merits and gave him credit accordingly, but as to his right to call them his own strain I positively object. They are simply French strains, and the fact of his having grown them for two or three years does not change their character. At that rate I might also claim a second paternity to the Bugnot strains.

His criticism on the last named pansies is also amusing, (to say the least of it), and after the splendid exhibit we made. But did Mr. Roemer ever see any of them? We almost doubt it. With me they have proved of a neat, compact habit, with flowers well elevated above the foliage and literally covering it with their immense blooms. I never claimed these to be as vigorous as a Trimardeau, but they amply repaid for the extra care required. As for their keeping qualities, we have sent flowers of them to almost every State in the country from 100 to 3,000 miles away, and they always arrived in good condition.

And now, with the hope of ending the controversy on pansies we will remark that Messrs. E. L. Beard of the Mass. Horticultural society and B. K. Bliss of Boston, both experts on pansies, are growing now Mr. Roemer's strain, and having seen my collection here and on exhibition, might enlighten us as to their comparative merits.

DENYS ZIRNGIEBEL.

Needham, Mass.

### Packing Plants for the Pacific States.

Much complaint is made by all florists in California of the difficulty in getting greenhouse stock from the east in good condition, and in many cases no doubt the fault may be fairly laid at the door of the shipper. The main loss seems to come through lack of ventilation and too



close packing, as well as the use of too large boxes not subdivided. Roses generally come best of course, but many claim that fuchsias and carnations are often a total loss.

Mr. B. O. Clark of the Park Nursery Co., suggests that after using moderate sized boxes of light material, they should be divided crosswise into two parts and that thin circular plates of zinc three to four inches across, perforated with half-inch holes be nailed over ventilating holes of the same size on four sides of both ends of the case where nearest to the top of the plants.

Plants have arrived in good shape where excelsior packing was used moderately between the foliage, tending to prevent heating. Thin subdivisions of boards or heavy pasteboard often prevents heated plants in one section from injuring the balance of the case.

The FLORIST believes that many shippers have much to learn about the needs of the Pacific coast business, and hopes that some of our readers there who have learned so well in that school of experience will give us some notes for publication.

#### Begonia Rosea Grandiflora.

As the tendency of public taste seems to grow more and more toward loose long-stemmed flowers, it may not be amiss to say a few words in favor of *Begonia rosea grandiflora* or *incarnata grandiflora* as some call it. If grown well, it gives abundance of flowering branches, which may be used either in baskets or designs or sold as loose flowers for filling vases, epergnes, etc. A few branches of it will add considerable to the bulk of a bunch or box of cut flowers and buyers will feel more satisfied with the quantity they get. In my opinion there is no other begonia more adapted for the purpose; it flowers from November to March and is easy of culture, the only trouble being its liability to damping off just above the collar after you have grown your plants to blooming size. But this is easy to avoid by placing in a rather dry situation and taking care not to wet the foliage and stems, especially on dull days or towards evening. If kept in a cool house, such as the side benches in a smilax house, with a temperature of about 50°, the flowers will not only have more substance and last longer, but will also be of a much brighter hue than those grown in a more moist and warmer atmosphere. Some florists may not agree with me as to the temperature and may think that in a cool house danger of damping off is increased instead, but by keeping dry enough and free circulation of air in the house, I know my plants are all right. The smilax house I grow my begonias in frequently goes down as low as 45° on a cold night in severe weather, but I seldom lose a plant from this cause.

The cuttings should be put in any time before April 15 for next winter's crop, and after putting off we let them stand in small pots until we get room and time after the spring sales. Then we report into 3½ or 4-inch pots and give them room on a bench in a house slightly shaded from the sun, pinching back as they grow. Two more repottings are required before October 1, when they should be in 6 inch pots, bushy plants about fifteen inches high and growing rapidly; in a few days they will show buds. I prefer keepup the plants under glass to outdoor culture or planting out,

as a good many florists are in the habit of doing; have tried both ways and get the best results under glass. The plants are literally covered with blooms by the end of November, and branches of these about ten inches long are very useful to help fill cut flower boxes, mixing with a few roses, carnations, bouvardias, etc., adding by their glossy foliage much to the favorable appearance of the other flowers in the box. In cutting we use up the tops on main branches of the whole lot first, thereby giving the side branches time to elongate and perfect their flowers and the plants so trimmed back, will after two or three weeks look even better than at first, having developed their side branches into new tops full of flowers again. As to soil, we give them about one third well decayed manure and two thirds sandy loam and find all begonias to do well in this mixture.

After the second repotting the plants require support and must be staked and tied. We grow 500 to 600 plants annually and if we had more would find use for them, but can not spare any more room in the fall, as they must not be set too close together, so the air can freely play around them or they will draw up and be weak and shanky. I find it more profitable to raise young plants every year, because old plants require too much room all the year around, although it may pay in some instances to grow them a second year if room can be found for them during the crowded months toward spring. The variety of begonia I am speaking of must not be mistaken for the old *insignis* or *incarnata*, which it resembles in growth and in flowers, but it is far superior to those in the size and quality of the flowers, being at least double the size of the old type.

Rochester, N. Y. J. B. KELLER.

#### Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1887.

July 1.—Tem. morning 78°, noon 93°, evening 85°. Wind SW. Repotted some large palms. Cleaned frame yard, staked and tied plants which needed it.

2.—Tem. 80, 80, 75. SW. to N. Trimmed elevated beds. Repotted lot of winter flowering begonias and plunged them in frame. Cleaned flower beds. Carpenter repaired side tables in conservatory.

3.—Tem. 75, 88, 73. SE. to N. Sunday.

4.—Tem. 76, 85, 80. S. to W. Celebrated the day.

5.—Tem. 73, 81, 78. W. to SE. Repotted a lot of celosias from 3-inch into 4-inch pots. Repotted tub palms and moved heavy plants in conservatory. First lot of seedling gloxinias begin to bloom. Staked and tied petunias and carnations.

6.—Tem. 74, 84, 78. S. to N. to E. Same as yesterday.

7.—Tem. 72, 87, 80. N. to E. Sowed seed of primulas. Trimmed and cleaned beds and arranged plants in No. 1.

8.—Tem. 79, 88, 85. S. Put fresh sand on the repaired side tables in conservatory and arranged with plants. Cleaned soil piles—cut down weeds, etc.

9.—Tem. 72, 83, 78. Trimmed and cleaned carpet beds. Tied holly hocks and ricinus.

10.—Tem. 80, 85, 82. SW. to SE. Sunday.

11.—Tem. 72, 86, 80. SW. to SE. Cleaned and trimmed plants in vases and stands outside. Removed from ribbon bed plants of stocks which had done

flowering and replanted bed with celosias and *Cineraria candidissima*. Carpenter and painter at work in conservatory.

12.—Tem. 78, 90, 87. SW. to SE. Same as yesterday and cleaned beds of shrubs.

13.—Tem. 82, 78, 75. N. to E. Cleaned beds and frame yard and planted bed at south end of park from which pansies had been removed.

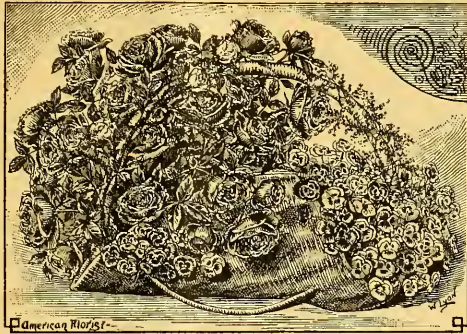
14.—Tem. 73, 89, 85. NE. Same as yesterday. Painter at work on roofs of greenhouses.

15.—Tem. 82, 98, 93. SW. Same as yesterday and commenced working on potting soil for coming season.

#### Floral Work at Hamburg, Germany.

On a previous occasion you asked me to contribute from my European trip experiences, which I regret to say was at the time impossible. This year, however, I can report from my first station a vast change in the style of arranging cut flower work and designs in this old town. The clumsy compact build is totally abolished, and a graceful airiness, branching on loftiness is practiced, which with good taste, is refreshing in the extreme. Flower baskets in the show windows are all of larger sizes, evidently for table decoration, made partly of rush with gilt edges, partly of palm leaf material on bamboo stands or on plain stands. Large handle baskets made entirely of *Etoile d'Or* chrysanthemums or yellow pansies interspersed with adiantums, and the handle trimmed with the deepest Jacq. roses, everything on long stems and vibrating, did not strike one as loud as the description would lead one to suppose, but was quite attractive in its way. Another 18-inch mascot handle basket filled entirely with Lord Beaconsfield pansies, a few wistaria trusses and the handle trimmed with Niel buds, topped off with a bit of straw-colored satin bow, was quite attractive in its loose arrangement. But the most exquisite arrangement I saw in a large handle basket was made of a mass of *dielytras* interspersed amongst white lilacs, lily of the valley, *La France* roses and cyperus leaves to relieve with its deep green graceful foliage. Vieing with this piece was a similarly large basket kept in the lilac and lavender colors by arranging a rhododendron truss amongst rose-colored lilacs as bottom work and fine blooms of *Cattleya Mossie*, miniature *Lilium candidum*, *Morissius The Bride*, on spikes, topping off the work, which showed green ferns and twigs overgrown with grey tree moss as found in the woods in winter, to good advantage. These baskets when filled, show a diameter of almost thirty inches and stand about as high in their airy arrangement.

A horseshoe filled with bronze-colored pansies, showing at the top a slight bouquet arrangement of Niel and *Falcot* roses with dried pressed fern turning yellow and brightened up with a bit of adiantum, was odd in its way. Funeral wreaths are made of blue forget-me-nots for groundwork with a bouquet of white roses and ferns at the side to show the wreath wider on one side than the other; the prevailing style is the oval or crescent wreath. A very tasty funeral piece was a twenty-four inch cross on scoop basket, the cross arranged with double white narcissus only. A pigeon was starting from the left crossbeam, whilst a large phoenix leaf formed the pendant in a graceful droop over the right crossbeam. This structure arose from the basket which held in terrace arrange-



BOGERT'S STEAMER SOUVENIR.

ment an assortment of different palm leaves; latanias, chamærops, kentias, cycas, etc., forming a tropic base through which apparently as a garland covering the moss filling of baskets, could be seen a roping of forget-me-nots, lily of the valley and white roses. This piece was priced at 75 marks or about \$18 American money. It was exceedingly chaste.

If this be of interest to you, I shall feel satisfied of having tried my hand at reportorial work.

A. R.  
Hamburg, June 7.

#### Baltimore Odds and Ends.

A couple of weeks ago, happening to have a leisure hour, I called on a young florist who had lately hung out a shingle of his own, and found him engaged in the hopeless task of trying to serve half a dozen customers at the same time. I "pitched in" to help him out as much as possible, but despite our united efforts two or three ladies lost patience and left in quest of "a greenhouse where they'd get waited on." It would not be correct to say that such occurrences are the rule, but they are unfortunately too common. Very rarely indeed do those who embark in the florist business find themselves overburdened with capital, and this fact together with the moderate profits at best accruing from the business, renders careful economy absolutely imperative. The great trouble, however, is that the beginner in his desire to economize and make both ends meet stands in danger of being at times "penny wise and pound foolish." If he is an energetic, industrious man he may get along during a considerable part of the year without employing any assistance. During the dull winter months he can easily get together an abundant stock for spring trade, but if he depends on his own unaided efforts to dispose of this stock, he will probably find at the end of the season that the volume of trade has not been what he might have reasonably expected. A florist's success in any community depends largely on the manner in which he ingratiate himself with his constituents at the start. It is not all sufficient that he sell good stock at a low figure; this may indeed be the primary consideration with some customers, but there are others—a very numerous class—who, while not quite regardless of quality and price, lay great stress on

being promptly and courteously served—conditions that can not be met where the florist is solely dependant on his own exertions. In whatever manner expenses are curtailed at other times, it is a duty the florist owes himself, to employ extra labor during the periodical "rushes" that occur in the trade, and particularly through the spring season. The extra expense thus incurred will prove a most excellent and profitable investment in view of increased sales and a firmer footing in his community.

Decoration Day was attended with very little increase of trade for the florist here as people depend largely on donations of outdoor flowers, and although the season has been a little late there was apparently enough hardy stuff obtainable to obviate any considerable purchasing from dealers. Pentland had several large orders for designs from out of town parties, two or three other florists had small orders from a distance, but taken all in all there was no particular increase in the volume of trade.

Spring trade in this vicinity has been excellent so far as my information goes, prices have been a little low in some instances, but the total receipts will probably exceed last year. Some of our florists have been holding public sales with profitable results and generally speaking the brethren are very well satisfied with the condition of trade. The forthcoming convention of the S. A. F. is at present absorbing the attention hitherto devoted to the Puritan rose, and in all probability with more satisfactory results, for I consider it perfectly safe to predict a very general pilgrimage of Baltimore florists to New York during that August gathering.

Horticulture in this section has lost one of its most sincere and liberal patrons in the person of T. Harrison Garrett, Esq., who was accidentally drowned June 7. The beautiful grounds at Evergreen—his country seat—and the spacious conservatories with their valuable contents, were ample evidence of Mr. Garrett's chief source of enjoyment. He was particularly fond of orchids and no desirable specimen was ever too high priced for him to secure. As a result he possessed one of the choicest collections in the country. Mr. Garrett's death will be especially felt by the Maryland Hort. society, of which he was a most generous supporter and a member of its executive

board. "The Garrett prizes" offered to amateurs who had no greenhouse or who kept no regular gardener, did much to stimulate a love for gardening amongst the people of Baltimore and brought to the exhibitions of the Maryland society many a collection of plants that would be no discredit to any professional grower. The floral tributes at the funeral were unusually profuse and beautiful. Particularly noticeable were a large cross and wreath of orchids, a cross of Jacq roses and crown of heliotrope, a wreath of Baroness Rothschild roses, a magnificent wreath—over three feet in diameter—of roses and myosotis, a cross of white roses with wreath of Jacqs across the arm and a wreath of black pansies and heliotrope; the latter design had an odd but very beautiful effect. I have rarely seen such a profusion of floral pieces at a funeral and never on an occasion when they appeared to me more appropriate not alone as indicative of the esteem in which Mr. Garrett was held, but as appropriate emblems of his well known purity and integrity and fitting tributes to the ruling passion of his life. A. W. M.  
June 18.

#### Bogert's Steamer Souvenir.

This basket is formed of a square piece of woven willow, drawn up in such a manner as to form two pockets, one at each end, one end pocket being in front and the other behind the handle. The front pocket is filled with pansies, the other with American Beauty roses, a few of which drop down over the center. A small bunch of pansies is fastened in front of the basket near the end, directly before the rose pocket. The handle is trimmed with moss roses and Asparagus tenuissimus. There are curved rests back and front.

#### Flower Farming.

We clip the following description of a farm devoted to the growth of hardy flowers for the London market from the *Journal of Horticulture*:

**TULIPS.**—Just now, however, we are most concerned with the flowers, and the tulips afford such a brilliant display that they merit first attention. A series of parallel beds, six feet wide and 300 yards long, are planted with tulips, several rows or a whole bed being devoted to one variety. Each bed contains six or seven rows according to the strength of the plants, and in this "little plot of tulips," as their owner terms it, there must be between 200,000 and 300,000 bulbs. The effect of such a number of plants in flower under a bright sun was dazzling in the extreme, and such large masses of brilliant colors could not be seen anywhere but in what is considered the special home of bulbs in Europe—Holland. The varieties grown are not very numerous, but are selected for the possession of certain important qualities, such as good habit, substantial flowers, clear, well marked, or effective colors, and durability. For example, the early Duc Van Thols are found to be too unreliable for culture on a large scale, and several other well known varieties have been discarded. A great favorite is the handsome Keyzers Kroon with its bright red yellow edged flowers, and one bed of this was grand last week. Another good variety is Thomas Moore, of sturdy habit, with well formed bronzy red flowers, a color much in demand just now. Duchesse de Parme is a useful tulip, very hardy and bearing flowers of capital sub-



stance, rich scarlet edged with yellow. Rosa Mundi is white, edged with rose; Rose Gris de Lin, dwarf, sturdy, of a soft rosy tint; L'Immaculee, compact, free and useful, one of the best pure white varieties, White Pottebakker being also useful but much stronger and taller than this. Proserpine, deep rose, is a well known excellent bedding variety, and is similarly useful for cutting; Artus, deep rich red, is another capital variety of fine habit; Sunbeam, very dark scarlet, is showy and even; Yellow Rose, Canary Bird, Yellow Pottebakker and Yellow Prince are the principal yellow varieties, all good, of slightly differing shades; Double Rose being a good double of a pale yellow tint; Princess of Austria is a very late variety with vivid scarlet flowers, compact in habit, and comes in well after the others, leading up to the Gesneriana varieties. In a favorable season a succession of flowers extending over a month is obtained, the Duc Van Thols commencing the period, but this season the buds were destroyed by larks, and owing to the delicate texture of their flowers they are soon damaged in bad weather. A keen strong wind soon spoils a large stock of flowers, and hail-storms also cause much injury, as every flower in the slightest degree defective is rigidly rejected when cutting for market. The flowers are gathered before they are fairly expanded, and placed in pots of water in cool sheds, where they will last for several days if necessary, but usually they are transferred immediately to the Whitton Farm, where they are tied in bunches of a dozen flowers each, and dispatched to Covent Garden Market the same night or early the following morning. It might be added that the beds are slightly raised with alleys between, and the bulbs are all lifted at the end of June, planting being done in October when the weather is suitable. No protection is provided beyond that afforded by a hedge on one side of the quarter devoted to the beds, but the most tender are planted near to this, and the others in succession according to their respective hardiness.

**DAFFODILS.**—The numerous forms of narcissi that are adapted for culture on a large scale and which yield abundant flowers for cutting constitute Mr. Walker's great specialty, and the tulips are only a kind of by crop. The daffodils are grown by millions, two or three acres of one variety, and some idea can be gained of the stock when it is said that in the height of the season 2,000 dozen bunches of twelve flowers each can be cut in one week, and as many as seventy dozen bunches of the beautiful N. obvallaris have been taken into market in one morning, cut from eight beds each 200 yards long. The beds are the same width as those for tulips—namely, six feet, and formed in a similar way, with seven rows in a bed of all the stronger growing varieties, but they are planted close together in the rows. About one-half of the bulbs are lifted as soon as the foliage turns yellow—namely, towards the end of July; they are immediately conveyed to sheds, sorted, allowed to dry gradually, and replanted at the end of August. Some varieties will succeed if left in the beds three years, but others require lifting every year; in fact Mr. Walker advocates annual lifting for all, and it is only the labor and expense that deter him from carrying this out as part of his system. The strongest varieties are planted three inches beneath the surface, and the weakest one and one-half or two inches. The flowers are always

cut with as long a stalk as possible, and a good indication of the respective strength of the bulbs can be afterwards detected in the growth of the portion of flowerstalk remaining; in the strongest bulbs it will extend to five or six inches, while on the weakest it will scarcely lengthen an inch. In growing such a large quantity of plants the selection of varieties is an important matter to ensure a succession of flowers over as long a period as possible. This is accomplished at Ham in a remarkable manner in fine seasons. N. pallidus præcox commences flowering in February, though this year its flowers were not cut until late in March. Then follows the Tenby Daffodil, N. obvallaris, which is a more reliable early variety though a little later than pallidus præcox. It is more hardy, and many persons prefer its bright golden flowers to the paler tints of the other. Of N. obvallaris it has already been noted there are eight beds 200 yards long, all the plants wonderfully strong and evidently thoroughly at home. They are two very useful varieties, but pallidus præcox is distinct in one respect—it produces a larger succession of flowers than any other. The large trumpet daffodils follow those named; then come the incomparabilis varieties, which at the present time are so beautiful. The poeticus varieties, such as ornatus, are also in flower now, the later poeticus recurvus will be in flower in a fortnight, and the season is concluded in June with the double poeticus, the handsome fragrant "Gardenia flowered Narcissus," which is so popular. The trumpet daffodils comprise the stately bicolor Horsefield and Empress, Emperor, Princeps, spurius, maximus, and many others. Two very beautiful varieties of N. incomparabilis now being cut in large quantities are Cynosure and Stella, the former with a pale yellow perianth with a rich gold crown, the latter with white perianth and delicate yellow crown. Both are very graceful, and for arranging in large vases they are admirable. The double forms of incomparabilis, Sulphur Crown and Orange Phoenix are also in great demand, and corresponding space is devoted to them. The Campanelle and the double N. odoratus are grown extensively, and the vigorous plants are now yielding these delightfully fragrant flowers in thousands. One bed of the Campanelle is very remarkable, the bulbs have been planted two years, and have ten to thirteen flowers to a root. Several Tazetta varieties are included, but they are not in such favor as the other sections.

The graceful Poet's Narcissus, or Pheasant's Eye, as it is popularly styled in the market, is in most demand, and a large space is devoted to its best varieties. N. poeticus ornatus, which is distinguished by its broad round pure white perianth lobes and orange or red tinted crown, is in its best condition at the present time; some thousands of flowers are being gathered every day from the twelve beds 200 yards long which are filled exclusively with this variety. Then of the later N. poeticus recurvus there are between two and three acres, the plants being readily distinguished at a glance from the other poeticus varieties by the slightly glaucous and drooping or recurving foliage. The flowers will not be expanded for a week or two yet, but they come as a most useful succession to the ornatus. About two acres are occupied with the double poeticus, and these will afford a fine June display and supply of flowers.

In a sheltered portion of the farm be-

neath the young fruit trees are some rows of the brilliant scarlet Anemone fulgens and its variety multipetala, which seems to succeed very well, and is had in flower as early as February in mild seasons. The plants grow strongly and flower freely, but it is essential that they be protected from wind or their beauty is soon destroyed.

The flowers gathered at Ham are transmitted to Whitton, where in spacious sheds numbers of women and girls are busily engaged in making up bunches and packing for market. The flowers are all carefully assorted and tied in neat bunches of a dozen each, so arranged that the flowers for convenience of packing all turn in one direction. Packing is delayed as late as possible, and the flowers are closely placed in shallow wooden boxes, no packing material being employed; a piece of paper only is laid over the bottom and sides of the box, and the flowers are covered in a similar manner after the boxes are filled. The flowers are stood in pots of water until wanted. If it is desired to hasten their expansion they are placed on shelves in a lean-to greenhouse; and if, on the other hand, it is necessary to retard their development they are placed in a cool dark shed, where they remain perfectly fresh for sometime if they were not too advanced when gathered. Cutting the flowers at the right time is an important point, and to accomplish this the beds have to be frequently examined, the boys chiefly employed in this work being soon trained to recognize the exact stage at which the flowers must be gathered.

**MISCELLANEOUS HARDY FLOWERS.**—Though daffodils are such a great specialty at these farms, they by no means have exclusive possession and attention. For instance, herbaceous pæonies are cultivated in large quantities for cutting, and a selection of one hundred named varieties, carefully reduced from all those obtainable, fill a series of large beds, and yield numbers of their showy flowers during the summer. Pyrethrum are similarly extensively represented, while irises, German, Spanish, and English are grown by thousands. Yellow crown imperials are flowering now, and the turban ranunculuses, which are grown in four colors, yellow, orange, scarlet and white, are evidently thoroughly at home in long beds, where they remain throughout the winter protected only by a layer of litter on the surface. Tulipas of the gesneriana and retroflexa types occupy much space, while of liliums there is a grand stock both of L. candidum and L. testaceum; long rows of these two species under the fruit trees will yield a bountiful supply of their pure white and buff colored flowers. The useful white Gladiolus Colvilli The Bride is another feature, and seems to be in the most vigorous health, while at the present time Doronicum caucasicum is yielding a profusion of its fine yellow flowers, the much taller and stronger Doronicum Harper Crewe, which grows at Whitton to the height of four or five feet, being also expanding its flowers. Poppies and numerous other flowers are included to extend the supply and increase the diversity, but the principal features have been noted.

**STEAM HEATING.**—Will some brother florist give me a few points on steam heating—what boiler to use, how to place pipes, etc., house 100x18 for roses? Would like boiler large enough to heat two houses of same size.

Allentown, Pa. A. B. ELLSWORTH.

## SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plants advs. not admitted under this head.

**SITUATION WANTED**—By a gardener of 10 years' experience. Can give first-class references. Address R. H., care American Florist, Chicago.

**SITUATION WANTED**—By a first-class gardener; Scotchman; 11 years' experience, both in private and under glass. Can give good references. Address K., care American Florist.

**SITUATION WANTED**—By a competent florist and propagator in a private or commercial place; age 25; 11 years' experience. Best references. Address THOMSON CENTRAL NURSERIES, Atlanta, Ga.

**SITUATION WANTED**—By a gardener, single man. Commercial place preferred. 14 years' experience. Prefer to take charge. Best of references. Florist, box 474, Maitteawan, Dutchess Co., N. Y.

**SITUATION WANTED**—By a young man with six years' experience in growing roses, cut flowers and general bedding stock, as foreman or assistant in either a private or commercial place. Address FLORIST, 120 S. Main St., Dayton, Ohio.

**SITUATION WANTED**—By a thorough plantman, florist and propagator, competent in all branches of gardening, either private or commercial. Married. Best of references. Address PLANTSMAN, care A. W. Smith, Boggs Ave., 32 ward, Pittsburg, Pa.

**SITUATION WANTED**—As propagator in commercial business, for roses, Clematis, Peonies, Chinese, as well as common greenhouse stock. First-class references. German; aged 27. Address A. FAHRENWALL, New Courtmole, Chester Co., Pa.

**SITUATION WANTED**—By a middle-aged German. Careful propagator, competent in all branches of gardening. Can come at once if particulars are given in answer. First-class private place preferred. Address FLORIST, care National Hotel, Indianapolis, Ind.

**WANTED**—A second-hand boiler and 700 feet of 4-inch pipe. Address R. S. RASMUSSEN, 338 Bank St., Waterbury, Conn.

**WANTED**—A good second-hand boiler that will heat 1,500 ft. 4-inch pipe. Address E. J. MILLER, Downer's Grove, Ill.

**WANTED**—Three thousand feet of second-hand 4-inch greenhouse pipe in good condition. Address F. H. MOSES, Bucksport, Me.

**WANTED**—A good second-hand greenhouse boiler that will heat 1000 feet or more of 4-inch pipe. Address E. FRANKS, Bandow, Cook Co., Ill.

**WANTED**—To know who holds a good stock of *Lapageria-alba* and roses. State size and price. R. MATTHE, 140 Canal St., New Orleans, La.

**WANTED**—An energetic young man for potting, packing plants for shipment and general greenhouse work. State wages expected. Address HARRY CHAPPEL, Williamsport, Pa.

**WANTED**—A florist, one who understands rose growing and cut flowers in a commercial place; must have references. German; married man preferred. Address M. WEISS, Evansville, Ind.

**WANTED**—We want to buy a quantity of palms, large ferns and other decorative plants. Please state size and price of plants with description. Address NAXZ & NEUNEH, Louisville, Ky.

**WANTED**—A foreman for the Botanic Garden of Harvard University. Applications enclosing copies of testimonials as to training, experience and character may be made by letter only to: PROFESSOR GOODALE, Cambridge, Mass.

**WANTED**—A competent florist who thoroughly understands growing roses, carnations, bulbs and other plants for winter blooming. Also growing a general stock of greenhouse and bedding plants; must give good references and be strictly sober and industrious. State wages desired. Address A., care American Florist, Chicago.

**FOR SALE**—One No. 4 Dick Saddle Boiler, 501 feet 4-inch pipe and fittings. For particulars address NATHAN SMITH & SON, Adrian, Mich.

**FOR SALE OR RENT**—Four greenhouses in good central location, in a city of 16,000 inhabitants. For terms, address CHAS. A. BURCKMAN, 230 N. State Street, Elgin, Ill.

**FOR SALE**—A greenhouse property in northern Indiana, with 2,600 square feet of glass, in a city of 10,000 inhabitants, natural gas. For further particulars address G. C. LANE, Peru, Ind.

**FOR SALE**—The best retail florist's and seedman's business in the Northwest (population 16,000). Reason for selling, with full particulars furnished on application. Address BATA, care American Florist, Chicago.

**FOR SALE**—To settle the estate, 4 greenhouses—about 6,000 square feet of glass—3,000 heated, and 3,000 as cold frames, one acre of land. Also growing a general stock of greenhouse and bedding plants; must give good references and be strictly sober and industrious. State wages desired. Address A., care American Florist, Chicago.

**FOR SALE**—A greenhouse property in a city of 10,000 inhabitants, natural gas, water works, and a good railroad center; 2,600 square feet of glass; Marsechal Niel and Lamarque roses running through the house; young orchard; frame house with four rooms; 150 feet front on Main street. For particulars address BOX 356 Peru, Ind.

## THE THREE B. B. B's.

BRIDE, BEAUTY,

BENNETT.

Still rank as the three best roses of recent introduction for forcing. 1 offer also

PAPA GONTIER, PURITAN,

METEOR,

And all other new and standard varieties of Teas, Hybrid Teas, Hybrid Perpetuals, etc., etc., that are desirable for the trade, in extra fine plants at reasonable prices. (Also offer for the first time)

COLUMBIA (NEW 1888.)

A bedding rose of very superior merit. For description, prices, etc., etc., write for Trade List to

JOHN N. MAY, SUMMIT, NEW JERSEY.

Mention American Florist.

## JAMES L. BOYSON,

CAEN, (CALVADOS) FRANCE.

1st Prize for Cut Blooms, Paris, May, 1887.

My CATALOGUE of the NEW

## EUROPEAN ROSES

will be ready January 1, 1888, and will be sent FREE on application.

A large stock of the last two years varieties, as well as all the older kinds for sale.

Send for my complete Catalogue of over 1,200 varieties, with raisers' names and date of sending out

## — ROSES —

E. BENARD,

ORLEANS, FRANCE.

ROSES ON THEIR OWN ROOTS

A SPECIALTY.

NURSERY STOCK of ALL DESCRIPTIONS

For particulars apply to

E. BENARD, Jr.,

P. O. Box 1400, San Diego, Cal.

Mention American Florist.

## EXTRAORDINARY CHANCE.

TO RENT CHEAP!

Six large Greenhouses all improvements, Croton water and hot water heaters, located at the main entrance of the largest and handsomest Cemetery in the city of New York. Well established trade by the same owners. Now has charge—over 15 years. Nearly 1,500 lots cared for and decorated. Only responsible parties need enquire at HULSEBOSCH BROS., P. O. box 3118, New York City.

**ROSES FOR FORCING.** GROWN FROM THOROUGHLY RIPPENED FIELD-GROWN PLANTS  
LA FRANCE, MAD. DE WATTEVILLE, SUNSET,  
PAPA GONTIER, BRIDE, BON SILENE, MAGNA  
CHARTA, GEN. JACQUEMINOT, AND OTHER POPULAR VARIETIES  
IN LARGE SUPPLY. SEND YOUR LISTS AND HAVE THEM PRICED.

SPECIAL QUOTATIONS IN LARGE LOTS.

Address **THE DINGEE & CONARD CO.,**  
ROSE GROWERS, WEST GROVE, PA.

## THE AMERICAN FLORIST COMPANY'S

## : : DIRECTORY : :

OF

FLORISTS, NURSERYMEN AND SEEDSMEN

OF THE

UNITED STATES AND CANADA.

1887.

## PRICE ONE DOLLAR.

The most complete and accurate list yet published. The key designates the particular branch of the trade each one is engaged in. The street and number of those living in cities will insure the delivery of tons of catalogues which have hitherto remained dead in the office to which they were addressed. At this low price every one in the trade can afford to have a copy for reference. Address

AMERICAN FLORIST CO.

54 LA SALLE ST., CHICAGO.

## NOVELTIES IN ROSES.

All the latest new varieties; also the leading forcing varieties Teas, Hybrid Teas and Hybrid Perpetuals.  
Novelties in Chrysanthemums. Catalogue specialties at lowest rates.  
Trade List now ready, mailed on application.

JACOB SCHULZ, LOUISVILLE, KY.

## ROSES.

A Superb lot of LA FRANCE ROSES, in gills, half pints and one and a half pint pots, respectively

\$8 00, \$12 00, and \$25 00 per hundred.

Also a few thousands of Bon Silene, Papa Gontier, C. Mermet and Nipheles at same prices.

PERLE DES JARDINS ALL SOLD THIS SEASON.

Address **J. KADLETZ,**  
P. O. Box 170, STAPLETON, STATEN ISLAND, N. Y.

## ROSES FOR FORCING.

10,000

PERLES, MERMETES, BRIDES,  
BON SILENES, SAFRANOS.

Strong healthy stock, 4-inch pots, \$10.00 per hundred; \$30.00 per thousand.

AMERICAN BEAUTY. Fine, 4-inch, \$12.00 per hundred. Several thousand JACQS, 4-inch, \$10.00 per hundred.

All the above varieties in 2½-inch pots \$5.00 per hundred, \$45.00 per thousand.

**C. F. FAIRFIELD, FLORIST,**  
SPRINGFIELD, MASS.

## New American Roses.

Freesia Refracta Alba and Leichtlinii.

ROSES SOUVENIR OF WOOTTON and ANNIE

COOK, 3-in. pots, \$6 per doz., \$35 per 100

4-in. pots, \$5 " " \$50

FREESIA REFRACATA ALBA, \$2.00 per hundred; \$15.00 per thousand.

" LEICHTLINII, \$1.50 per hundred; \$12.00 per thousand.

Address **JOHN COOK, Florist,**

BALTIMORE, MD.

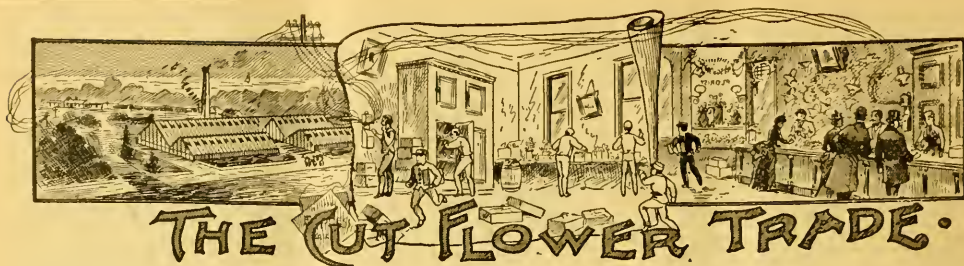
IMPORTER AND GROWER

HYBRID PERPETUAL ROSES

WILLIAM H. SPOONER,

Jamaica Plain, Boston, Mass.





### New York Summer Floral Styles.

Florists the past fortnight have had opportunity to show their fine taste in apartment ornamentation, so numerous have been the weddings among their first-class patrons. Arbors and canopies have gone out of fashion, and for the summer an arch of palms is the style for the arrangement of foliage under which the bride receives congratulations. For the background some graceful design, such as a crescent, is attached to the mirror or window before which the embellishment is put up. Large specimen palms form the arch, and the plants are graduated down to fill the curve of the half circle. Mantel bankings are very low. When there is only a straight shelf, foliage is bedded through the center, with usually a monogram in the middle of scarlet geraniums and ageratum, a brilliant combination. At each end is a cornucopia of flowers, with blossoms and vines drooping over the edge.

Arches that separate drawing rooms are lambrequined with foliage, in which are La France roses. Pink, white and yellow are the prevailing colors. Bells are hung through this arch, sometimes three, sometimes five. They are of different sizes, and all of different colors. Modern top mantel pieces are lambrequined with foliage to harmonize with the arch, but instead of bells there is a fringing of flowers, snowballs and water lilies now being in vogue for this purpose. Phillips of Brooklyn, has done some very stylish work lately, of which we shall give pictures soon.

Roses and orange flowers compose wedding bouquets. The latter flowers are placed in a cluster in the center. Lilies of the valley are given up, only because they are out of season. Corsage bunches of water lilies and blue centaurea are the most fashionable for evening wear. These are worn so that the stems fall below the waist. Sometimes a water green moire ribbon holds the bunch together. Bridesmaids are carrying large rustic sun hats filled with water lilies and pink peonies on their arm. They are finished with water green moire sashes for handles. Daisies and water lilies is a combination very much used in these hats. They are carried by little maids of honor, when moss rose buds and daisies are the filling.

Dinner arrangements are exceedingly pretty. Glass dishes both high and low, are filled with roses, orchids, and small flowers and are placed in irregular positions throughout the table. Tall flower glasses hold the long stem roses and make end pieces. A low, round salad bowl holds cattleyas in the center, and there are crescent dishes and glass baskets which contain mignonette and Wilder carnations. For young ladies' luncheons field daisies and buttercups are very fashion-

able. Roses never appear at their repasts, but pink carnations for the favor bunches. Some lovely dinner decorations have been made with pink rhododendron blooms and white hydrangeas. These are placed in low glass dishes.

Farewell tokens for steamers and for friends separating for the season are of very elegant description. McConnell makes up a rose basket of very light and white chip which is so gracefully filled that the blossoms and light vines nearly cover the outside. It is literally veiled with vines, and these are selected so they are really a collection of trailers worth examination. The center blossoms are long stem hybrids and these are banded with tea roses, which are graduated down to an edging of moss rosebuds. Delicate shrub sprays are intermingled. In all designs there are hints of the country garden in the form of shrub bloom.

Grasses, which are particularly handsome this year on account of the copious spring rains, are very fashionable for all table arrangements. They are used with field buttercups and daisies for young ladies' luncheon parties, when they are placed in tall, slender glasses, at the covers, and in epergnes suitable for their support throughout the board. Epergnes with cornucopia designs reaching out, or those with gondola, shell shape, or swan ornamentation, are especially beautiful when filled with grasses and flowers. Field flowers and grasses are tied in large bunches for fans. There has never been shown such a decided preference for field grasses and flowers, and the blossoms of shrubs. The latter appear in the most expensive designs. Table garniture may be summed up for the present as a great deal of cut glass and silver, (the dishes being usually high), a large amount of grasses and ferns, and a few flowers. Hinsdale carnations, which have always been a favorite blossom with young girls, sometimes grace their luncheons, and are then used with their own foliage. There is no bedding and scattering of flowers over the cloth. Arrangements are severely neat, but naturally fantastic, with such graceful material as is used.

Wedding decorations are accomplished with a certain character of conciseness. The short, French curtain so much in vogue where lace or muslin is employed, is now made of foliage and wire, giving a lovely effect to windows and mirrors. A finish is made with yellow button daisies where the rods are supposed to be run through. The mantels are covered with ferns which rise to a high effect in field grasses with daisies, white peonies and spikes of pale gladioluses. This is a lovely arrangement. Ribbon grass is included with field varieties. The former is much used in all designs. Brides are carrying bouquets of lily of the valley, this having appeared from green-

houses, since the outdoor crop has passed its season.

Those who are carrying roses select Mme. Plantier, and charming it is for a wedding bunch at this time. A few orange flowers are clustered near the center of the bunch, which is only of moderate size. The very large wedding bouquet is not at present stylish. Bridesmaids carry moss rose buds with a cluster of some fragrant flower combined, such as mignonette. The latter is running very poor. Both the deep pink and blush varieties of moss buds are used in combination. Small unopened moss buds are exquisite for green bouquets, which are much in vogue for the mothers of brides and grooms to carry at weddings. The green bouquet, as made up by our best florists, is a very elegant design, now that ferns and grasses are so beautiful.

The half screening, or shading of blossoms with foliage is a new feature introduced by Mr. Walter Hall, of S. J. Burnham & Co., in wedding baskets. White and blush roses, pea blossoms and lilies have a lacy covering of adiantums, Asparagus plumosa, or peris. The French fisherman's basket is much used for wedding souvenirs. It is sometimes flounced with white satin and has the handle bound with the same, when it is very dainty.

Pillows of cattleyas are now the richest designs made up for funerals. They are simple and elegant, the corners are cut off with soft foliage, and they are not inscribed as a rule; only one variety of flower appears in wreaths and crosses. The latter are composed of lily of the valley or roses, and the wreaths are of moss buds, mignonette or hybrid roses finished with a cluster of grasses and vines. A very imposing funeral arrangement was made this week, when an old lady was buried. The parlors of the house were decked with pale purple gladiolus and a variety of fine foliage. There was only palm leaves tied with purple ribbon on the casket.

Large palm leaf fans with bent handles are made of foliage to screen fire places. These bestow a cool and refreshing air to parlors. FANNIE A. BENSON.

THE NEW YORKERS are as busy as bees with convention matters.

PITTSBURG.—At the State Conclave of Knights Templar in this city flowers were freely used to decorate the headquarters of various commanderies. The headquarters of Pittsburg Commandery No. 1 was a veritable bower of floral beauty. Upon the large mirrors "No. 1" was lettered in flowers while the mantels were banked with bloom, and ferns and palms were arranged throughout the rooms. At the Albemarle the decorations were of great beauty, flowers and tropical plants being combined in a truly artistic manner.

## THE AMERICAN FLORIST

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 Cents a Line, Adate;  
Inch, \$1.25. Column \$14.00.  
Cash with Order.

No Special Position Guaranteed.  
Discounts, 3 months, 5 per cent; 6 months, 10 per cent; 12 months, 20 per cent.  
No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch not accepted.  
Advertisements for July 15 issue must REACH US by noon, July 9. Address.

THE AMERICAN FLORIST CO., Chicago.

BACK NUMBERS.—We can supply all back numbers of the AMERICAN FLORIST except the first five issues and No. 34, at six cents per copy.

THE VASE illustrated in last issue and described as introduced by Mr. Fred Gordon, New York, was, we are advised by Mr. Gordon, designed and introduced by Julius J. Heinrich, of Brooklyn, N. Y.

MESSRS. P. WHITNALL & Co., of Milwaukee, pathetically request us to announce that their wants are now supplied and that they find it impossible to reply to all the answers to their recent advertisement.

WESTERN FLORISTS.—The Chicago Florists' Club is arranging for a special train from Chicago to New York next month. The Pennsylvania R. R. has offered one of their superb vestibuled trains to be run on limited time and with an observation car while going over the Allegheny mountains. This route is undoubtedly the best from Chicago to New York, and as the rate of fare will be the same over all roads why not join the Chicago Club at their city and journey thence to New York together? If you wish to go on the special train write to C. L. Grant, Sec'y., 54 La Salle street, Chicago.

### A Correction.

On page 502, center of middle column, last issue, in article under head of Boston, read "A method of irrigation by means of a perforated water pipe," instead of "A method of propagation" etc.

### Catalogues Received.

J. J. Van Loghem, Maarlem, Holland, bulbs; James Veitch & Sons, Chelsea, London, England, plants; E. H. Krelage & Son, Haarlem, Holland, bulbs; Fraser & Lippincott, Huntsville, Ala., nursery stock; R. Van der Schoot & Son, Hillegom, Holland, bulbs; Geo. F. McFarland, Harrisburg, Pa., plants; Dammann & Co., San Giovanni a Teduccio, Italy, bulbs.

### The Sun Revolves,

From a circular gotten up by an employee of a western florist we learn that: "We shall be like the sun that revolves in unknown space, surrounded by our smaller competitors, who, like the stars, live by the reflected light of the greater planet."

This copious flow of language has completely stunned the "smaller competitors."

W. F. SHERIDAN,  
Wholesale & Commission Dealer

—IN—

CUT FLOWERS.

721 Sixth Avenue, NEW YORK.

## Wholesale Markets.

### Cut Flowers.

BOSTON, June 25.	
Roses, Teas .....	\$ .50 @ 1.00
" Fancy .....	3.00 @ 4.00
" Jacq. hybrids .....	1.00 @ 2.00
Carnations .....	.50
Stocks, Spirea .....	1.00
Gloxinas .....	4.00
Smilax .....	20.00
Adiantums .....	1.50

NEW YORK, June 25.	
Roses, Bons, Goutiers .....	1.00
" Peries, Niphetos, Souv. .....	1.00
" Mermets, Brides .....	3.00 @ 3.50
" Benetts .....	3.00
" La France .....	3.00
" Hybrids .....	8.00
Carnations, short .....	1.00
Carnations, long .....	1.00
Heliotrope .....	1.00
Mignonette .....	1.00 @ 1.50
Lily of the valley .....	4.00
Pansies .....	1.50
Smilax .....	17.00
Asparagus .....	25.00
Callas .....	7.00
Longitrium lilies .....	8.00
Daisies, per 1,000 .....	1.00

CHICAGO, June 27.	
Roses, Bons, Safranos .....	\$2.00
" Peries, Niphetos .....	3.00
" Mermets, Dukes .....	5.00
" La France, Benetts .....	5.00
" Brides .....	5.00 @ 6.00
" Beauties .....	25.00 @ 35.00
Carnations, short .....	.75
Carnations, long .....	1.00
Pansies .....	1.00
Adiantums .....	1.00
Candids .....	5.00 @ 6.00
Tuberoses .....	1.50 @ 2.00
Smilax .....	18.00 @ 20.00
Paeonies .....	3.00 @ 5.00
Callas .....	15.00
Heliotrope .....	1.00
Hollyhocks .....	2.00 @ 3.00
Marigolds .....	1.00

PHILADELPHIA, June 25.	
Roses, Teas .....	\$2.00
" Peries, Niphetos .....	3.00
" Bonnetts, La France .....	6.00
" Mermets .....	5.00
" Souvs .....	4.00
" Am. Beauty .....	15.00
" Magna Charta, Puritan .....	10.00
" Nips, Goutiers .....	5.00
" Brides .....	6.00
Carnations, heliotrope .....	.50
Lily of the valley .....	10.00
Hardy lilies .....	8.00
Callas .....	8.00
Smilax .....	20.00

## WM. J. STEWART, Cut Flowers & Florists' Supplies

### —= WHOLESALE —=

67 BROMFIELD ST., BOSTON, MASS.

CHOICE GLOXINIA BLOOMS . . . \$ 4.00 per 100  
PINK POND LILIES . . . 10.00

## CUT FLOWERS AT WHOLESALE N. F. MCCARTHY & CO.

WHOLESALE FLORISTS,  
63 Bromfield St., under Hort. Hall, Boston, Mass.

We have made large contracts with the best Rose grower about Boston to handle their entire stock this season. Our stock will consist of Papa Gontier, Bennett, Pierre Guillott, American Beauty, Mermets, La France, Malmaysis Cook, Brides, Niphetos, Perie, Niel, Anna Webb and Grace Wilder pinks, long stems; other flowers in variety. We shall have a particularly large lot of Mermets and Portos, so that in sending to us when you fail to get them elsewhere you will feel reasonably sure of getting them. Unknown parties must give satisfactory reference or 'et us send C. O. D. Write for information.

Mention American Florist.

## CUT ROSES AT WHOLESALE.

The only establishment in the West growing Roses exclusively. 20,000 square feet of glass devoted to the growth of the Rose. We cut, pack and ship the same day, thus enabling the transient to get the Roses without being handled the second time. We ship Cut Roses all over the country with perfect safety.

Also all the leading varieties of young Rose plants for sale.

GARFIELD PARK ROSE CO.,  
1688 West Madison Street,  
Corner St. Louis Avenue, CHICAGO.

Mention American Florist.

Thos. Young, Jr., & Co.,

## Wholesale Florists,

INCORPORATED 1885,

20 W. 24th St., NEW YORK.



W. S. ALLEN,

## WHOLESALE DEALER IN CUT FLOWERS,

36 EAST 23rd STREET, NEW YORK.

ESTABLISHED 1877.

Price List sent upon application.

## LaRoche & Stahl, Florists & Commission Merchants

—OF—

CUT FLOWERS,  
1237 Chestnut Street, PHILADELPHIA.  
Consignments Solicited. Special attention paid to shipping. Mention AMERICAN FLORIST.

## C. STRAUSS & Co., TELEPHONE 977. WASHINGTON, D. C.

## WHOLESALE ROSE GROWERS AND DEALERS.

LARGE STOCK OF ALL THE NEW ROSES.  
Orders booked for young stock at special rates.

## HAMMOND & HUNTER, Wholesale dealers in Cut Flowers and Florists' Supplies 61 West 30th Street, NEW YORK.

## WELCH BROS., WHOLESALE FLORISTS,

165 Tremont Street, BOSTON, MASS.  
We make a specialty of shipping choice Roses and other flowers, carefully packed, to all points in Western and Middle States.  
Return Telegram is sent immediately when it is impossible to mail your order.

## KENNICOTT BROS., WHOLESALE FLORISTS.

ALL CUT FLOWERS IN SEASON.

Write for price list. Consignments solicited.

27 Washington Street, CHICAGO.

## CUT FLOWERS

The choicest Cut Flowers at lowest market rates shipped C. O. D. Telephone connection. Use A. F. Code when ordering by telegraph. For prices, etc., Address,

J. L. DILLON, BLOOMSBURG, PA.

## N. STUDER, Anacostia P. O., Washington, D. C.

WHOLESALE

## Plant and Cut Flower Grower

— ALL CUT FLOWERS IN SEASON. —

Write for price list.

10,000 Coleus, Yellow Alternantheras and Achyras  
thes from 2-inch pots, \$2.00 per 100.  
5,000 Geraniums in good variety, from 4-inch pots  
\$5.00 per 100. Larger lots, special prices.



## ☞ The Seed Trade.

### The Seedsmen's Convention.

About fifty members of the Seed Trade Association were present at the annual meeting in Chicago June 12-14. Some twenty new applications for membership were received and acted upon. The report of the committee appointed to investigate the matter of newspaper circulations was received. It contained some very interesting information. The postage bill now before Congress was vigorously discussed and other matters of interest merely to the members of the association received attention.

Officers for the ensuing year were elected as follows: President, Geo. S. Haskell, Rockford, Ill.; 1st Vice President, John Allan, Picton, Ont.; 2nd Vice President, H. W. Johnson, Philadelphia; Secretary and Treasurer, Albert McCullough, Cincinnati; Assistant Secretary, Frank T. Emerson, Omaha, Neb.; Executive committee: Wm. Meggatt, Wethersfield, Conn.; John Fottler, Jr., Boston; S. F. Leonard, Chicago; S. E. Briggs, Toronto; H. W. Wood, Richmond, Va.

Washington, D. C., was named as the place for the next annual meeting.

In the way of entertainment the local committee took the convention in a body through some of the principal business and residence streets of the city to Lincoln Park and return, by trolley coaches and carriages one day; to South Park station by train, thence through the South Park system by park phaetons and coaches, stopping for a short time at the main display of fancy bedding, down Drexel and Michigan boulevards to the Hotel Richelieu, where the party sat down to the annual convention banquet, the second day.

At the banquet the menu was a lengthy one, and though the first course was served at 8:30 p. m., it was midnight before the speech making was concluded and the party dispersed. Responses to various toasts were made by Messrs Ely, Fottler, Vick, Maule, Cleveland and Allan of the association and by Messrs. W. K. Sullivan and Geo. S. Driggs, who were present as guests. In response to the toast "Seeds that rot in the ground," Messrs. Vick and Maule made a point by responding that personally they "knew nothing about such seeds." Mr. Driggs—who is a lawyer—made in his speech a very amusing comparison between a verbenas and a lawyer. He said: "Lawyers are very much like verbenas. Now I suppose you all wonder what possible resemblance there can be. But listen to this description which I have clipped from one of your catalogues: 'Verbenas like a sunny spot, plenty of moisture and food; in fact the ground can not be made too rich for them. They will however do fairly well in a poor soil. Twenty for \$1'."

Mr. D. M. Lord, of Lord & Thomas, presided and made a very acceptable toast master. On the title page of the menu was an engraving of a vine which bore nearly all the vegetables and flowers ordinarily catalogued by one seedsman, all growing on the one vine. Mr. Fottler stated in his speech that he had obtained the stock and was going to push it. That if it didn't bear squashes you were sure of cucumbers and if the latter failed you would at least get tomatoes—you were sure to get something. "A novelty for 1900" was the legend below this remarkable vine.

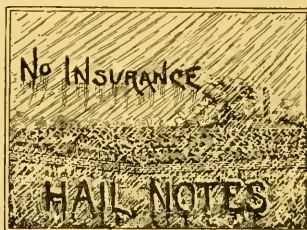
DAN'L DE COU, representing S. L. Allen & Co., of Philadelphia, will sail for England July 8 on a business trip, introducing "Planet Jr." goods.

GEO. TYLER, the well known implement man of Boston, who has been confined in an asylum since December last is thought to be hopelessly insane.

FOR THE NEXT CONVENTION at Washington would it not be well in addition to discussions to have two or three good papers prepared for the programme?

MR. VICK OF POSTAL COMMITTEE has late news from Washington to the effect that the Senate appropriation bill now has an amendment making postage on seeds two cents per pound.

PHOTOGRAPHS OF THE CONVENTION.—Those wishing copies of the photograph of the delegates to the recent seedsmen's convention taken in a body at Chicago can secure them from D. R. Clark, photographer, 2134 Michigan avenue, Chicago.



PHILADELPHIA.—The recent hail storm completely wrecked the greenhouses of some local florists. Dennison Bros., Faust Bros. and James Shelley lost about 500 boxes of glass each. C. Ensinger, W. Hanson and a number of others experienced losses, but they were light compared with those of the first three named. A detailed report will be prepared for next issue.

DAVENPORT, IOWA.—A hail storm recently played havoc with greenhouses in this city. Following are the losses: F. G. Bahr about 2,500 feet of glass; F. Bills 450; J. T. Temple 450; C. Dan-nacher 400; T. Nissen 200; T. Granville 2,000; I. Gerard 200; Wm. Westphal 300; J. Partridge 150; Mrs. Asmesen 500. There was of course a heavy loss of plants in addition.

GLEN COVE, N. Y.—At the Philadelphia convention I voted against the hail insurance, but I never will again. June 15, 87° in the shade, close, extremely sultry; 6:30 p. m. black clouds covered up the northwestern horizon and vivid lightning shot fast and unpleasantly near; a rushing wind blew up the leaves; rain came at 7 heavier, then fiercer wind and most terrific hail. Thin glass was shattered all to pieces; extra double thick withstood it more bravely; in the frame ground every sash was injured. We lost more glass than by the blizzard of last March. But it isn't the glass so much as the plants and flowers that grieves me. I never before saw anything tattered and torn, beaten into the earth and cut to pieces as were the plants of all kinds. And what is surprising, two miles from here not a hailstone fell; we just happened to be in the breast of the storm and got cut to pieces.

## He Carried Hail Insurance.

On the 27th day of May Davenport was visited by one of the worst hailstorms that has been known for thirty years. I happened to be a member of the Hail Association, and at this date can afford to smile. My loss was 900 lights of glass broken, for which I have received payment in full from the association. I cannot say that I wanted the storm in order to get my money out of them—would much rather have paid an assessment for someone else—but as the storm came my way I am truly thankful that I had joined the Hail Association.

Davenport, Iowa. F. L. BILLS.

## The Nurserymen's Convention.

About 100 members were in attendance at the Thirteenth Annual meeting of the American Association of Nurserymen, Detroit, Mich., June 20-22. It was decided to increase the price of nursery stock from 10 to 15 per cent. The matter of postage reduction on seeds, cuttings and bulbs was dropped, the association concluding that it was a matter for the Seedsmen's and Florists' associations which already have the matter in hand. A number of interesting papers were read and discussed.

## Boston.

The Gardeners' and Florists' Club will have a harbor excursion in July.

F. C. Fisher is building at South Sudbury a carnation house 300 feet long by 39 wide. It will be constructed mainly of cement and iron with glass 16 x 24 and heated by steam.

Geo. L. Parker will add to his establishment at Dorchester this summer three new rose houses respectively 126, 158, 168 feet in length. They will be heated by the Exeter steam boiler.

Mrs. F. B. Hayes entertained the committees of the Massachusetts Hort. society at Lexington when the rhododendrons were in flower. Mr. Comley has reason to be proud of his rhododendrons, which have been finer this year than ever before. He has taken all the best premiums at the various exhibitions this season, including the Hunnewell Silver Pitcher.

The demand for baskets and bouquets for use at graduation exercises has been enormous this season, and June is coming to be, in consequence, one of the best months in the year for the florists. Baskets seem to be coming generally into favor once more. Outdoor roses are very plenty and of best quality. Carnations, spirea and stocks are badly overstocked.

W. J. S.

## Chicago.

At the last meeting of the Florists' Club Mr. J. T. Anthony read a paper on "Luck," which excited some discussion. He took the ground that florists were too apt to ascribe success in growing plants and flowers to "good luck" and failure to "bad luck." He believed that luck did not enter into the question of success; that work, care and attention brought success, and that the lack of these brought failure. Several amusing illustrations were used, showing the continued bad luck of those who only half attend to their business.

Floral designs of great size and remarkable construction were freely used by politicians during the recent Republican convention in this city.

Florists are evidently as thoroughly interested in politics as any other class, for a large number of florists from distant cities were in the city during the recent Republican convention.

Kennicott Bros. have doubled up their store space and are putting in an ice box some twenty feet in length.

Spring plant trade has been very large, probably one-third larger than ever before, though a cold spring retarded planting to a considerable extent. The weather has now changed however to the other extreme, and is uncomfortably hot.

J. C. Vaughan left for an European trip June 17. He expects to return to New York in time for the August meeting.

### News Notes.

LITCHFIELD, MINN.—Decoration Day trade somewhat larger than last year. Sales chiefly in bouquets.

PORTLAND, OREGON.—Trade in flowers for Decoration Day was quite satisfactory; better than last year.

PITTSBURG.—The store of J. Wilkinson Elliot passed into the hands of the sheriff June 2 on a confessed judgment given to his aunt.

ROCHESTER, N. Y.—The local club agreed upon a scale of prices for plants this spring which was maintained and prices were firm in consequence.

MINNEAPOLIS.—At the last meeting of the Florists' Club, Richard Wessling read a paper on "What shall we plant for spring and summer cut flowers."

OMAHA, NEB.—Henry Ehrenpfort will build three new houses this summer; two 12 x 60 and one 16 x 66, also an office 16 x 16. Plant trade this spring was the largest ever known here.

DENVER, COLO.—At the fruit and flower show to be held here July 13-14-15, the floral display will be the most attractive part of the exhibition. Many local florists will make large displays.

LANCASTER, PA.—W. C. Pyfer has sold his greenhouses and stock to Geo. W. Schroyer. The stock includes Mr. Pyfer's choice collection of chrysanthemums. Mr. Pyfer will remove to the west.

KANKAKEE, ILL.—John B. Faber retires from the florist business. He is succeeded by his two sons under the firm name of Faber Bros. Mr. Faber left for Europe June 18, where he will spend several months.

MEMPHIS, TENN.—The sale of plants and orders for fine bedding were much increased this year, all the florists were well satisfied with their spring trade. John M. Gift, manager of Henry Moore's place, expects to return north after his time expires August 1.

ST. JOSEPH, MO.—I feel very much elated over sales this spring. Our people are beginning to use bedding plants more generally than before. Geraniums, salvias, verbenas, coleus, alternantheras, vincas, etc. sold well. Cut flower trade keeps up remarkably well.

DETROIT.—The increase in spring plant trade was small, but it is the unanimous opinion of florists that trade would have been fully one-third larger than last year if it had not been for the very late season. There was an increased demand for large palms for vases and planting in groups.

BALTIMORE.—Wet and cold weather greatly injured spring plant trade. Competition was brisk and prices lower. An increased demand was noted for chrysanthemums, fuchsias, roses and verbenas. While the city trade was less than last year, there was an increase in the demand from out of town.

NEW YORK.—An attractive programme is being arranged for the florists' excursion which takes place on the 24th of August. Will Currie and Archy Middlemas of Milwaukee, and Miss Nettie McEwen the famous Metropolitan soprano will figure prominently among the talented vocalists who have consented to appear. Miss McEwen has appropriately selected one of her most successful songs "The Flower Girl," her rendering of which completely electrified the audience upon the occasion of her debut in Chickering hall two years ago.

ST. PAUL.—At the annual meeting of the Society of Minnesota Florists held in this city June 19, the following officers were elected for the ensuing year: President, E. V. Beales, of St. Paul; Vice-President, J. E. Northup, of Minneapolis; Secretary, Aug. S. Swanson, of St. Paul; Treasurer, E. A. Venzke (re-elected). Mr. E. Nagel, the retiring president, and Messrs. G. Malmquist and E. A. Cuzner form the executive committee. We start in on the new year with more enthusiasm than ever before and hope to accomplish much before another year passes by.

HARRISBURG, PA.—The Decoration Day demand for cut flowers far exceeded that of any previous year. June 10—Children's day—the supply of flowers was totally inadequate to meet the demand. The majority of churches were more elegantly decorated with flowers than ever before. It is reported that Mr. Brenneman will erect a new rose house this summer. The Capitol grounds are taking on their usual attractive appearance. The carpet bedding, under the skillful hands of Mr. Logan, is a thing of beauty. The Pennsylvania railroad is preparing to further ornament their depot grounds by handsome flower beds. This road never does anything by halves.

ST. PAUL.—This spring has been a bad one for the plant trade. Although we have escaped our annual hail storm we have had a very backward season; cold, rainy and dark weather all through the months of April and May. Very little in the way of bedding out was attempted until June 1, and as very hot weather set in it had to be done in a few days or not at all. Very few tulips or hyacinths were in bloom out of doors until the last of May. The retailers however report brisk sales of cut flowers at rather better prices than usual at this season. The Decoration Day trade was not as good as usual, owing to the scarcity of flowers and blooming plants; everything offered in that line was gone early in the morning.

### 10,000 SMILAX PLANTS.

Grown in 3-inch pots, extra strong, for sale cheap. Orders shipped now, and filled in rotation. Address at once.

PAUL BUTZ & SON, New Castle, Pa.

### ADVERTISE IN

— OUR —

### CONVENTION SUPPLEMENT.



**TRY DREER'S GARDEN SEEDS**  
Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free.  
HENRY A. DREER, Philadelphia

### SMILAX FOR EASTER

IN QUANTITY FOR THE TRADE.  
STORM KING FUCHSIA—Well rooted Cuttings, \$3.00 per 100, as good as pot plants.  
FUCHSIA PHENOMINAL—\$6.00 per 100, or will exchange for Chrysanthemums and Geraniums of some varieties, and Abi. Dubi. Thompson.

F. E. FASSETT & BRO.,  
Ashtabula, O.

### FOR SALE.

A surplus stock of STORM KING FUCHSIAS, nice little plants from thumb and 2½-inch pots, at \$3.50 per hundred.

D. LEE & SON, Madison, Ohio.

### APPLE GERANIUM SEED.

Per 100 40c; per 1000 \$3.00; per 10,000 \$25.00. Orders filled while stock lasts. First come, first served. Address

BROTHERS' INDUSTRIAL GARDENS,  
MOBILE, ALA.

### THE BRIDE.

Surplus Stock of above Rose for Sale.

Strong and Healthy Plants rooted in January.

Price, \$5 per 100, \$40 per 1000.

F. HAHMAN,

HARROWGATE LANE, PHILADELPHIA.

### CABBAGE PLANTS.

EARLY WINNINGSTADT,  
FOTTLER'S BRUNSWICK,  
AND FLAT DUTCH.

Fine plants, securely packed for shipment. 1,000 \$1.50; 10,000 \$12.00; 25,000 \$25.00.

J. L. DILLON, Bloomsburg, Pa.

2,000,000

### CABBAGE PLANTS NOW READY.

All orders filled promptly at any distance.

### WE PACK LIGHT.

All leading varieties, \$2.00 per thousand. 2,000 or more, at \$1.50 per thousand.

Special prices on large quantities and to dealers.

### TOMATO PLANTS

Now Ready, at \$1.00 per hundred.

### CELERY PLANTS July 1st.

Send for list FREE.

### G. R. CLARK & CO.

SEEDSMEN, FLORISTS AND NURSERYMEN,  
SCRANTON, PA.

150,000 Celery Plants—Golden Heart, Half Dwarf, Boston Market, White Plume. Lots of one to five thousand, \$2.00 per 1000.

250,000 Late Cabbage Plants—Excelsior, Flat Dutch, Drumhead, Long and Short Stem Drumhead and other varieties. Lots of one to five thousand, \$1.00 per thousand.

Florists look to your interests, and secure one or more of our New Bedding Coleus Eureka. See Aug. number of this Journal.

R. W. HARGADINE, Felton, Del.



## New York.

Wm. H. Brower, Esq., sailed for Europe June 16.

C. F. Klunder opens at Newport the 15th inst.

Among the decorations on the Lincoln monument April 30, were paper roses.

Alex. McConnell has been visiting the the gardens of interest around Boston.

There is an unusually large number of gardeners changing positions this summer in the vicinity of New York.

Shrub bloom has brought better prices in this market this season than ever before. Syringa is particularly popular.

There has not been a season in several years when so many expensive flowers have been ordered for school commencements.

California fruits arrive here nearly a fortnight earlier than usual. The apricot crop has never before been so large or so fine.

McConnell made a wedding decoration last week in which a room arrangement with field daisies was a particularly charming feature.

Florists' shop windows have assumed their summer aspect. All bedding moss and ornamental greenery has disappeared, and very few flowers are displayed.

La Fayette statue, as well as the generality of public monuments, were conspicuous Decoration Day for bad taste and a conglomeration of gaudy flowers.

C. F. Klunder made a most artistic grouping of foliage plants on the stage of the Metropolitan opera house for the commencement exercises of Columbia college.

Florists in up-town locations have reaped the benefit of school commencements this month. Orders have been very large for these occasions, scarcely one of which has been given to down-town dealers in flowers.

S. J. Burnham & Co. made an elaborate wedding decoration at Irvington on the Hudson, when sixty yards of ribbon was used in making lines to partition the promenade for the bride and groom to pass to the position where they were united. The entire house was trimmed with La France roses and fine foliage.

The interests of the clerks in floral establishments should not be overlooked in our annual conventions. It is really surprising to note how poorly informed many of them are upon topics that the average clerk outside the floral stores is familiar with. And as to good manners and anything like presentable breeding, is a subject upon which they need many suggestions. A polite and well bred clerk is as necessary as fine flowers to make a store attractive. This class (the clerks) are entirely neglected in the teachings of the conventions. F. A. B.

## WE HAVE

## FINE PLANTS OF THE FOLLOWING

ROSES—		Per 100 Per 1000
Safirino, Mermet, White Bon Silene, Bride, La Pactole, Queen of Bedders, Mud, Alex. Bernix, and fifty other good varieties of Teas, Polyanthas, Bourbons etc.	4.00	\$30.00
Geraniums in 20 good varieties.....	2.50	
Carnations, the grow, fine plants.....	2.00	
Alternanthera 5 var.....	2.00	18.00
Calce in variety.....	2.00	
Periwinkles.....	2.00	
Bougardia Libanilla.....	6.00	
Honey suckles, Halleana and Aurea.....	2.00	
Reticulata.....	3.00	
Polioveria secundum glabra.....	7.00	
Begonia Rubrella and Semp. Glie. Rosen Passiflora, Constance Elliott, Fordill Smith, Trifasciata.....	3.00	

List mailed on application.

Address **GEO. THOMPSON & SONS,**  
LOUISVILLE, KY.  
Mention American Florist.

## DUTCH BULBS!

G. V. VAN ZANTEN &amp; CO.,

## WHOLESALE BULB GROWERS,

Hillegom, Haarlem, Holland.

ESTABLISHED 1852.

Our stocks are selected with the greatest care for the American trade.

Price list free on application—before ordering write for one.

## HULSEBOSCH BROS.,

Dutch Bulb and Plant Growers,

OVERVEEN, in HAARLEM, HOLLAND,

SUPPLY THE TRADE.

Address for the United States, P. O. Box 3118 New York City. Wholesale Catalogue on application.

## NYPHÆA ZANZIBARENSIS.

ROYAL PURPLE WATER LILY.

We have a fine lot of Seedlings raised from the true, deep blue water lily, which we offer at a very reasonable price.

MAITRE &amp; COOK,

140 CANAL STREET, NEW ORLEANS, LA.

## TO THE JOBBING TRADE.

I HEREBY INFORM THE TRADE THAT

Mr. H. A. DAACKE, 22 Dey Street NEW YORK,

Is my sole Agent for the United States and Canada for the sale of my own grown

## DUTCH BULBS,

Of whom Catalogues may be had upon application.

B. J. LOMANS,

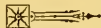
Haarlem, Holland.

WE ARE NOW BOOKING ORDERS FOR  
HYACINTHS, TULIPS, Single and Double NARCISSUS, Etc.  
SEEDSMEN AND FLORISTS

Importing direct should write us for prices. Special rates to large buyers. Largest stock of

Hyacinths, Tulips, Polyanthus, Single and Double Narcissus, Narcissus Bicolor  
Horsfieldi, Poets Ornatus, Trumpet Major, Double Von Sion.

R. VAN DER SCHOOT &amp; SON.



Bulb Growers,

HILLEGOM, near Haarlem, HOLLAND.



TRADE MARK.

POLMAN MOOY,

HAARLEM,  
HOLLAND.

WHOLESALE GROWERS OF

## DUTCH BULBS.

SEE OUR GENERAL LIST FOR NOVELTIES AND SPECIALTIES.

HEADQUARTERS FOR FORCING BULBS.

ESTABLISHED IN 1810.

## PRICES LOW.

## DUTCH BULBS, ROMAN HYACINTHS,

Lilium Candidum and Harrisii, Freesias, Paper White Narcissus, etc.

From the BOSKOOP HOLLAND NURSERY ASSOCIATION, HARDY LOW BUDDED DWARF  
ROSES, TREE ROSES, RHODODENDRONS, Azaleas, Lilacs, Hydrangeas;

EXTRA STRONG CLEMATIS, ETC., ETC.

Catalogues for Fall Importation now ready.

ADDRESS:

C. H. JOOSTEN, Importer,

3 Coenties Slip, NEW YORK.

BULBS

WE ARE LARGE

IMPORTERS of FORCING BULBS.

SEND YOUR LIST FOR PRICES.

CURRIE BROS.,

SEEDSMEN AND FLORISTS.

MILWAUKEE, WIS.

ADVERTISE

IN OUR  
CONVENTION SUPPLEMENT.

**AUGUST RÖLKER & SONS,**  
44 Dey St., NEW YORK,  
Supply the Trade with  
**SEEDS, BULBS,**  
And all kinds of  
**FLORISTS' SUPPLIES.**  
Revised Price List mailed on application.

**Bulbs, Immortelles, Etc.**  
**J. A. DE VEER,**  
(Formerly of DeVeer & Boomkamp.)  
83 Water St., New York.  
SOLE AGENT FOR  
THE GENERAL BULB CO., Vogelenzang, (Holland.)  
Ls. BREMOND FILS, Ollioules, (France.)

— A FEW CHOICE —

**GLADIOLI, DAHLIAS,**  
And Spring Bulbs left, at reduced prices.  
Full Catalogues now ready. Free to applicants  
in the trade.

**FORCING BULBS.**  
ROMANS AND DUTCH HYACINTHS,  
NARCISSUS, LILUM HARRISII  
AND CANDIDUM, TULIPS,  
FREESIAS, ETC.  
Send for prices by the 100 or 1000. Special list will  
be ready in August.  
**A. GIDDINGS, DANVILLE ILL.**

**FREESIA REFRACTA ALBA,**  
**NOW READY.**

Per 100 Per 1000  
First Quality, fine.....\$3.00 \$25 00  
Second Size.....2.50 20.00  
Express or postage will be prepaid to any  
address in the United States at these prices.

ORDERS TAKEN NOW FOR  
**LILAC PLANTS FOR FORCING,**  
**CHARLES X.**

Strong, 3 year old, fine imported plants, pot grown.  
Per dozen, \$8.00; per hundred, \$65.00.

Write for Special Import Prices of  
**FORCING BULBS.**

**J. C. VAUGHAN,**  
146 & 148 W. Washington St., CHICAGO.

**HIGH GRADE PANSIES**  
**A SPECIALTY.**

After a thorough trial of the most noted strains  
of Pansies in cultivation, we confidently recom-  
mend the following to the trade as a long way ahead  
of all others, for size or colors:  
Our Improved Giant Trimardeux as the best  
for market. Package of 1000 seeds, \$1.00.  
And New French Fancies as Extra. Package  
of 400 seeds, \$1.00.

**DENYS ZIRNGIEBEL,**  
Needham, Mass.  
(NEW CROP SEED AFTER JULY 1st.)



**KILLS**  
**INSECTS**  
—  
**FISHKILL-  
ON—**  
**HUDSON, N.Y.**

WE ARE NOW PREPARED TO QUOTE PRICES ON  
\***ALL FALL BULBS.**\*  
**FREESIAS AND BERMUDA LILIES** are Lower.  
*PRIMULA SEED* from the best English grower at moderate prices.  
**ALL SEASONABLE SEED FOR FLORISTS' USE**  
**TO MARKET GARDENERS.**

We can supply the finest strains of Cabbage Seed raised by Market Gardeners  
for their own use.

	Per lb.	Per oz.
"VANDERGARD."—The best White raised on Long Island . . . . .	\$10 00	\$1.00
"MARVIN'S SAVOY."—Very fine, sure ever-heading Savoy. . . . .	8.00	.75
"LONG ISLAND WAKEFIELD."—Very early and very large. . . . .	10 00	1.00
"WICKS' RED."—Our best and darkest, sure-heading red. . . . .		1.00

Cabbage Seed circular sent on application. Our full Wholesale Catalogue will be  
issued July 15.

All attending the Convention in August are cordially invited to visit us.

**V. H. HALLOCK & SON,**  
**QUEENS, NEW YORK.**

**F. E. McALLISTER,**  
— WHOLESALE DEALER IN —  
**Seeds** For the Florist Market, Garden-  
er and Farmer. **Requisites** Such as Baskets, Im-  
mortelles, Grasses, Mosses, Boquet Pa-  
pers, Pampas, Plumes, etc. **Bulbs** For the Green-  
house or Gar-  
den.  
22 Dey Street, - - - NEW YORK.

**SEGERS BROTHERS,**  
GROWERS OF  
**HOLLAND BULBS.**  
OUR SPECIALTIES ARE:

Holland Hyacinths and Tulips, in any quantity; also Crocuses,  
Narcissus, Daffodils, Liliums, Lily of the Valley, Gladiolus  
The Bride, Anemones, Ranunculus, Spiraea Japonica, etc.

References as to quality of our Bulbs, etc., to several United States Florists  
and Seedsmen.

Our Wholesale Catalogue is now Published.  
PLEASE DO NOT DELAY TO SEND YOUR ORDER.

**LISSE. NEAR HAARLEM, HOLLAND.**  
WHOLESALE ONLY. NO AGENTS.



**BASKETS, BOUQUET PAPERS.**  
Send for special list for School Commencements.

**FALL BULBS.**  
ORDERS TAKEN NOW FOR ROMAN HYACINTHS, LILY CANDI-  
DUM, LILY HARRISII, AND ALL FORCING BULBS.

ALSO FOR THE FULL LINE OF DUTCH BULBS.  
**JAMES KING,**  
170 Lake St. CHICAGO.

**DUTCH HYACINTHS.**

Our Wholesale Catalogue for the coming season of  
**DUTCH HYACINTHS, TULIPS, NARCISSUS,**  
**AND ALL OTHER BULBS AND BULBOUS ROOTS**  
is now ready. Don't forget to forward a postal card if you want one, as there is a  
great reduction in prices of

*Hyacinths, Narcissus, Gladiolus, and other worth-growing Bulbs and Roots.*

**SEGERS & CO.,**  
BULB GROWERS,  
**LISSE, near HAARLEM, (Holland.)**



## Credit.

No man can conduct his business without giving and receiving more or less credit. It is a necessary adjunct to any business, but how many mourn their mistaken judgment in the man to whom they have given time on bills of goods. In giving credit to a man doing business on a limited capital something more than his honesty must be considered. Has he the ability to succeed? Is he conducting his business on a solid basis? Are his methods conservative or is he inclined to take big chances? All these points must be taken into consideration.

Every failure affects the whole trade, and where he who has failed came to grief through selling goods at a smaller price than would leave a profit after cost of goods and all expenses were paid, a serious injury is done to those with whom he has come in competition, for the lowest price makes the market and the others must meet it and patiently wait till the balloon goes up, when prices will gradually revert again to a normal standard. But in the mean time this one competitor has managed to make heavy losses for all. A man who sells goods at cost can not meet his engagements and a dealer who sells such a man on credit, knowing the facts in the case, should not be surprised when he finds the sheriff in possession.

## Your Fall Trade List.

Print your FALL TRADE LIST in the AMERICAN FLORIST. It will cost you less money and do you more good than to print and mail your list yourself. We will print and mail your list, in the columns of this paper, to 5,000 buyers for much less than the postage alone would cost you. A full page in the FLORIST costs only \$42 for one insertion. It would cost you twice that sum to get up a list of your own and mail it to 5,000 addresses. Think it over! We can save you money and secure you better results at the same time, for the FLORIST is preserved while your trade list otherwise mailed would rarely be kept on file. We will print extra copies for you—from the type after being set—at a nominal rate if you wish extra ones to mail in response to requests. If half a page is large enough it will cost you but \$21 for the service.

## Express Rates.

Is it impossible for the S. A. F. to get any relief for the trade from excessive express charges? The American Express Co. has just increased its rates 50 per cent. It now costs 75 cents to send a 10 pound package valued at \$1 a distance of but 60 miles. W. H. WINTING.  
Wellsboro, Pa.

## ROSES.

Strong, healthy plants, now ready, from 2 1/2-in. pots, Per 100  
S. D. Ami, Safrano, Mermel, Bon Silene, Cook, \$5.00  
Papa Gontier and Countess de Fribourge, 8.00  
The Bride and La France, 6.00

## SILK-AN.

From 2 1/2-inch pots, vigorous young plants, \$3.00 per 100; \$25.00 per 1000.

L. C. WOOD & BROS., Fishkill, N. Y.

### HIGLEY'S TRADE LIST OF SEEDS, PLANTS, BULBS AND FLORISTS' REQUISITES

Now out. If you do not receive one, send for it. Address

HENRY G. HIGLEY,  
CEDAR RAPIDS, IA.

## ROEMER'S SUPERB PRIZE PANSIES.

"The Finest Strain of Pansies in the World."  
Introducer and Grower of all the leading Novelties.

Catalogue free on application.

FRED. ROEMER, SEED GROWER.  
QUEDLINBURG, GERMANY.

### THE BEST AND CHEAPEST DOUBLE PETUNIA SEED

(*P. hybrida grandiflora* fl. pl.)

in the market. For sale to the trade by the grower.

G. A. McTAVISH,  
NORTH SAANICH, B. C., CANADA.  
Mention American Florist.

### LAING'S BEGONIAS.

AWARDED FOUR GOLD MEDALS.

A Great Speciality. JOHN LAING & SONS, LTD., LONDON. A Great Speciality. 

### JOHN LAING & SONS

Cordially invite all Americans and Colonial friends visiting London during the summer months to come and see their grand collection of single and double

### BEGONIAS

Which for quality and quantity are unapproached by any other collection. Our fields and houses during the summer and autumn will be a sight never to be forgotten.

### DO NOT FAIL TO SEE THIS GRAND FLORAL DISPLAY

Best route to reach our Nurseries is from Charing Cross, Cannon Street, or London Bridge (30 minutes' ride) to Cufford Bridge Station, thence a walk of 5 minutes. DISCUPATIVE CATALOGUES SENT FREE.

### JOHN LAING & SONS,

Seed, Plant and Bulb Merchants,  
FOREST HILL, LONDON, ENGLAND.

Registered Telegraphic Address—Caladium, London.  
Mention American Florist.

### CHINESE PRIMROSE SEED.

The finest Primroses in the market. Plants of robust habit, and flowers unsurpassed in beauty. TRADE PACKETS containing 300 seeds, fresh and prime; 18 varieties; put up expressly for florists. Price \$1.00. Address orders to

HENRY S. RUPP & SONS, Shiremanstown, Pa.

### NATAL, SOUTH AFRICA.

### BULBS, TUBERS, ROOTS.

A Wholesale Catalogue of select Native Plants cultivated by the undersigned is now ready, and will be forwarded free on application. Orders booked for spring delivery.

R. W. ADLAM, Maritzburg, Natal.

## THE ILLUSTRATED Dictionary of Gardening

A Practical and Scientific Encyclopædia of Horticulture for Gardeners and Florists.

EDITED BY GEO. NICHOLSON,

of the Royal Botanic Gardens, Kew, England.

A most valuable work of reference for florists and all interested in horticulture.

PRICE, for the set of seven handsomely bound volumes, \$21.00.

JAMES A. PENMAN,

12 Dey Street, NEW YORK.

Sole Agent for the United States and Canada.

Orders may also be addressed to the

AMERICAN FLORIST CO.,

54 La Salle Street, CHICAGO.

## FORCING BULBS

FOR

Fall Delivery.

## NARCISSUS

AND OTHER

## FORCING BULBS

For Fall Delivery

All Good Flowering Bulbs.

OF NARCISSUS I SHALL HAVE ABOUT TWO MILLIONS READY FOR FALL DELIVERY.

Narcissus Albicans, the best of the single white trumpets.

Narcissus Bicolor Empress, the queen of the bicolor daffodils, enormous flowers.

Narcissus Bicolor Grandis, similar in color to Horsfieldi, but having larger flowers and blooming later.

Narcissus Bicolor Horsfieldi, one of the largest and best for cutting.

Narcissus Bulbocodium, the Hoop Petticoat daffodil; very fine, strong bulbs.

Narcissus Bulbocodium Citrinus, like the yellow Hoop Petticoat, but with pale sulphur-yellow flowers.

Narcissus Golden Spur, very large deep yellow flowers and early blooming; one of the best.

Narcissus Henry Irving, one of the best deep golden yellow trumpets.

Narcissus Incomparabilis Cynosure, a beautiful single Incomparabilis for cutting, yellow cup, divisions creamy white.

Narcissus Incomparabilis Siella, large single white variety, very early, fine for cutting.

Narcissus Major, true, one of the best forcing sorts, large yellow trumpet, similar to maximum.

Narcissus Nobilis, a first-class variety for florists, free and early.

Narcissus Obvallaris, the true Tenley daffodil, one of the best varieties, forcing deep rich yellow flowers of great substance.

Narcissus Odorus Campenelle, the well-known Campenelle jonquil, very strong bulbs.

Narcissus Orange Phoenix, large double white flowers with orange center, good for cutting.

Narcissus Pallidus Præcox, the earliest of all forces very freely; single sulphur-colored trumpets.

Narcissus Poeticus Ornatus, the early white poet's Narcissus, the best of the Poeticus section for forcing and for cutting.

Narcissus Poeticus Plenus, the double white Narcissus.

Narcissus Princeps, one of the best forcing sorts; soft pale yellow trumpets.

Narcissus Rugulosus, true, large yellow trumpet, very free and very early.

Narcissus Scoticus, the Scotch Garland daffodil, a beautiful variety both for borders and for forcing.

Narcissus Van Sion, true, the double deep yellow daffodil.

And many other first-class sorts. List of varieties and price I should be happy to furnish on application.

Anemone Fulgens, true, fine strong English grown tubers.

Chionodoxa Lucilia, true, beautiful blue flowers in early spring.

Freesia Relracta Alba, one of the best modern plants for forcing, pure white, sweetly scented flowers.

I shall be happy to post prices of any of the above upon application.

THOS. S. WARE,

HALE FARM NURSERIES,

Tottenham, London, England.





## San Francisco.

The only change worthy of notice in the trade here, and a very remarkable one, is the increase in the growth of cut flowers under glass. Two years since the California Rose Co. and Mr. H. Newberger were the only growers of greenhouse roses for cut flower purposes to any extent, and among the score of retail flower stores few of them could offer a customer really first class long stemmed buds. To-day there are probably a dozen firms who make the growth of cut flowers under glass the leading feature of their business, and of stock for this purpose the rose is most used.

The trade prices are low; fine La France equal in bud, foliage and stem to the best eastern grown stock, selling the last week in May at three dozen for one dollar. Probably lower than can really be afforded, for Mr. Newberger claims to have paid as high as \$20 per ton for coal this winter, brought from the Sandwich Islands; certainly the amount of fire needed, in proportion to the glass is much less than at the east, owing to the mild winter.

The "fakir" abounds, in fact he almost predominates. On Decoration Day at the corner of Kearney and Market streets I counted seventeen bouquet peddlers with baskets, inside a distance of fifty feet. It goes without saying that the San Francisco people are flower buyers, and though the retail prices are low—very low for outdoor grown stock, poorly handled—the demand is certainly good, and the volume done for the size of the city I believe equals or exceeds that of any in the eastern states. But little is done comparatively in forcing bulbous flowers for early use—something in Roman hyacinths and lily of the valley, but nothing with narcissus or tulips. J. C. V.

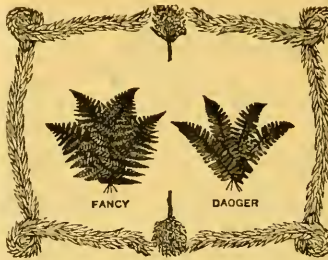
## Los Angeles, Cal.

The florists, seedsmen and nurserymen in and about the city report excellent business for the season. There are three very central cut flower stores, Mrs. Geary, Central Park Floral Co., managed by Mr. E. Snyder, and Franks Floral depot. The business could be greatly increased if good greenhouse grown roses and other stock could be had. W. S. Lyon's place is also very central and long established, he does a good trade both in flowers and trees. Mr. Lyon recently had the sad misfortune to lose his young daughter, 11 years old, by diphtheria, and he has left town for a mountain trip for needed rest and change.

Mr. Denham, manager of the seed and nursery department of the Germain Fruit Co., is from Buffalo and is pushing both lines of their business with great energy. They represent the California Nursery Co. at this place. Several ladies have organized the Inglewood Floral Company, and with a capital of \$50,000, about one-third of which is said to have been paid in. Mr. Hittel, formerly with John Rock at San Jose, is superintendent and no better posted man can be found in the state. They will grow some cut flowers as well as plants and trees.

The Park Nursery Co. at Pasadena have made a good start and are likely to take a prominent position in the Southern California nursery and greenhouse trade.

**JOHN CURWEN, JR.,**  
GENERAL  
GREENHOUSE STOCK AND ROSES.  
Vista Nova P. O., Delaware Co., Pa.  
Money Order Office: Bryn Mawr, Pa.



## CUT FERNS.

## NEW CROP 1888.

NOW READY. Used for Bouquet Work, filling Flower Baskets, Decorating Altars, &c., &c. and are preferred by many to smilax.

\$1.50 per thousand Ferns.

BOUQUET GREEN. \$2.00 per bbl. (30 lbs.) or \$5.00 per 100 lbs. Season commences Oct. 1st for holiday trade.

SPHAGNUM MOSS—Long clean fibre, dry or green, \$1.00 per bbl. or six bbls. for \$5.00. Sample or trial sacks containing 3 bushels of Moss, dry, very light, designed for express shipments, \$1.00 per sack.

L. B. B'AGUE, Hinsdale Mass.

TEA-SCENTED AND OTHER ROSES,  
30,000 IN POTS.

Clematis, 50,000 in pots,

Grand plants, fit for shipment at any time.

## 200,000 Dwarf Roses for Fall Delivery.

Our collection is unequalled, and the plants promise to be exceptionally fine.

20 ACRES FRUIT TREES. 10 ACRES RHODODENDRONS.

Descriptive and Priced Lists mailed on application.

**JOHN CRANSTON & CO.,**

KINGS ACRE NURSERIES,

ESTABLISHED 1785.

HEREFORD, ENGLAND.

## FRESH SMILAX SEED.

CROP OF 1888.

**MICHEL PLANT AND SEED CO.,**

718 Olive Street, ST. LOUIS, MO

YOU CAN'T get better printing anywhere than I send you, and there are few places where as much practical knowledge of plants, bulbs, seeds and trees is stirred in with the printing. The mixture gives accurate, intelligent work in my specialty, which is printing for nurserymen, florists and seedsmen. Try me for anything you need. Good catalogues assured; lots of handsome cuts here.

J. HORACE MCFARLAND, Harrisburg, Pa.

## CHRYSANTHEMUMS.

We have a fine stock of the new French and English varieties. There are many exceptional fine sorts in this collection.

## \* CHRYSANTHEMUMS \*

Our stock of the new varieties of last year is large and healthy. There is not a florist in the country who grows Chrysanthemums who can afford to be without them.

## CHRYSANTHEMUMS.

An exceedingly large and fine list of older varieties. Can supply too in too varieties; or by 1,000 or 10,000. PRICE VERY LOW.

Address all orders to

**W. P. SIMMONS & CO.**

GENEVA, OHIO.

Mention American Florist.

## SMILAX.

FINE YOUNG PLANTS NOW READY

Address

**HENRY PALMER,**

Langhorne Nurseries. LANGHORNE, Bucks Co., PA.

A. BLANC,  
ENGRAVER FOR FLORISTS,  
PHILADELPHIA.

Catalogue of electrots of plants, flowers, designs, etc., with '75 and '78 supplements, 35 cts., with .g. etable, 30 cents, which deduct from first order. Electro of this Cut, \$1.50.

**KALAMAZOO CELERY PLANTS**  
Ready June 1st at \$3.00 per 100 for any of the leading varieties; large lots very cheap. Celery Culture complete 50 cts., or given with all orders of 500 plants or over. G. BOCHVE & BRO., Kalamazoo, Mich.

# ✽ LILIUM HARRISII. ✽

PRIME, WELL-RIPENED BULBS.

EXTRA FINE CROP THIS SEASON.

READY TO SHIP AUGUST 1st.

4-5, 5-7, 7-9 and 9-12 inches in circumference, packed in prepared clay, in 100 to 500 Bulbs per case.

PRICES UPON APPLICATION.

## SIEBRECHT & WADLEY,

409 FIFTH AVENUE, NEW YORK.

MENTION AMERICAN FLORIST.

## ORCHIDS

Cheap as Good Roses.

Send 8 two cent stamps for Catalogue and Plate.

BRACKENRIDGE & CO., GUYANSTOWN, Md.

## ORCHIDS.

Best and Largest Stock in New England to Cut.

CAPE COD PINK POND LILIES,  
AND ALL COLORS.

Send for List.

BENJ. GREY, Malden, Mass.

## Ferns, Palms, Orchids

FERNS FOR FLORISTS' PURPOSES,  
BY THE HUNDRED OR THOUSAND.

GEO. WITTBOLD,  
Cor. School and Halsted Sts.,  
LAKE VIEW, CHICAGO.

## ORCHIDS A SPECIALTY.

The Stock at the Clapton Nursery is of such magnitude that without seeing it it is not easy to form an adequate conception of its unprecedented extent.

Coleus, Roses, Fruit Trees, Ornamental Leaved and Flowering Plants, also

GENERAL NURSERY STOCK  
Of fine quality and immense extent.

The Glass Structures cover an area of 257,300 feet.

HUGH LOW & CO.,

Clapton Nursery, LONDON, ENGLAND.

F. A. RIECHERS & SOHNE A. G., Florists,  
HAMBURG, GERMANY.  
Largest stock of Azalea indicæ, Camellias, Lilies of the valley for the wholesale trade. Price list on application.

Contracts made now for Fall Delivery 1888

Japanese Lily Bulbs

Japanese Seeds,

Trees, Shrubs.

California Lily Bulbs

Conifers, Palms

and Bamboos.



H. H. BERGER & CO., 315 & 317 Washington Street,  
SAN FRANCISCO, CALIFORNIA.  
Send for Estimates. Established 1878.

FOR SALE. FALL DELIVERY.

50,000

AZALEA INDICA and CAMELLIAS.

For Catalogues, address

C. H. JOOSTEN,

Importer of Bulbs and Plants.

3 Coenties Slip, NEW YORK.

FOR SALE.

30,000 FREESIA REFRACTA ALBA BULBS, and a limited quantity FREESIA LEICHTLINII MAJOR at \$2.50 per 1,000, delivered first week in July. A discount will be given on lots of 5,000.

Young Roses will be partly taken in exchange, if sorts suit. Address

S. EDWARDS & SON,  
BRIDGETON, Camb. Co., N. J.

## CELERY PLANTS.

WHITE PLUME, PERFECTION HEART-WELL, NEW ROSE, GOLDEN HEART, GOLDEN DWARF.

\$2.00 per thousand, in any desired quantity.

SEASON BEGINS JUNE 1st AND EXTENDS TO JULY 20.

JOSEPH DUNKLEY, Celery Grower,  
KALAMAZOO, MICH.

SURPLUS TO EXCHANGE

For F. P. and Tea Roses, 2 1/2 in. pots.

4,000 Finest Named Ranunculi; 2,000 Eulalias, var. and zeb.; 500 Am. Sarrinensis; 500 L. Candidum; 20,000 A. Atamasco; 400 Cooperia Drummondii; 100 Iris Susiana; 100 Hemerocallis flava; 100 Arundo donax var.; 400,000 Sets Ex. Pearl Tuberoses, both extra large and medium. Address at once with offers,  
MRS. J. S. R. THOMSON, Spartanburg, S. C.

## FOR FLORISTS.

	Per 100
Coleus, 20 varieties.....	\$ 4.00
Geraniums, 4-inch pots, in bud.....	10.00
Roses, 4-inch pots, fine.....	4.00
2-inch pots, fine.....	12.00
Achyranthes, 2-inch pots, 6 varieties.....	5.00
Chrysanthemums, 2-inch pots, 90 var.....	4.00
Verbenas, 2-inch pots, 12 var.....	3.00
Loebelia, 2-inch pots.....	4.00
golden Feverfew, 2-inch pots.....	4.00
Violets, Maria Louise, 2-inch pots.....	4.00
Carnations, 2-inch pots, 8 var., strong.....	4.00
Single Petunias, 2 1/2-inch pots, good var.....	4.00
Echeverias in boxes.....	5.00
Heliotropes, 2-inch pots, 8 var.....	4.00
Miniature, 4-inch pots, in bloom.....	10.00

The above stock in fine, healthy condition, and can be used for immediate sales. Any number of plants may be taken at above quotations, providing you take nothing less than one dozen.

GEO. W. MILLER,

WRIGHT'S GROVE, CHICAGO.

Mention American Florist

## CHRYSANTHEMUMS.

## NOTICE.

GEO. W. SCHROYER, Lancaster, Pa., will hereafter have for sale, in quantity, W. C. Pyfer's Superb Collection of new and old Chrysanthemums.

SIGNED W. C. PYFER.

## PRIMULA OBCONICA IN QUANTITY.

FINE, HEALTHY PLANTS.  
PETER FISHER,  
Montvale, Mass.

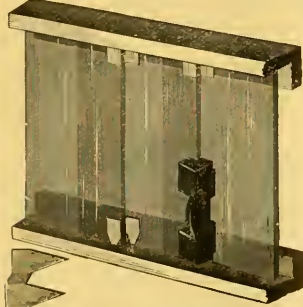


Riverside Park, Allegheny, Pa.

In your last number of the AMERICAN FLORIST you make mention of an Allegheny firm's effective advertising in Riverside Park, by planting out some handsome beds and the firm's name in letters of tulips and hyacinths. I have been a resident of Allegheny for thirty years and never heard of such a park being in existence. Now I don't like to see strangers coming to our city and wasting a week's time seeking for this park and then find out that we have no such place. I don't think the firm desires to impose on the good nature of others, but they should at least have printed directions giving the nearest route to the famous park, and distribute them to the public, or some enthusiastic Pittsburgers may lead them to their Second avenue park which is noted for its fine beds of tin cans of various varieties, and its zoological garden with the genus of ruminant quadrupeds, the goat, as a specialty. As it may be possible that some of the western delegates on their way east to the convention may stop over in our city and would like to see Riverside Park and our other parks in the vicinity, the florists of our cities should at least be informed of the whereabouts of Riverside Park, so that they can enable their fellow florists to find it.

Pittsburg, Pa. E. C. REINEMAN.

## H. W. EAMES & CO.'S PATENT TWIN GLAZIER POINTS



### A USEFUL INVENTION

The twin point at the upper left hand corner of cut represents the full size of points, while the tool that is used for pushing the points into the window frame is shown on the cut.

No more leaky skylights! No more slipping and breaking of glass in greenhouses or Farmers' Sash.

These points the manufacturers claim are far superior to the old mode of setting glass, as they will hold each pane in place, thus not allowing the glass to slip, causing binding and consequent cracking. Each box contains 40 rights and 40 lefts. The manufacturers also make a tool for driving the points. These points are the cheapest and best, and most durable in the market, as testified to by many florists in every state in the union. Sold by most of prominent seedsmen in the country. If you don't find them at your supply stores, send direct to the manufacturer as we have made arrangements with the Adams Express Co. for low rate of express charges to promote traffic, so you need not fear charges will be too high. A Liberal Discount to the Trade.

Price 35 cents a box. Tools 15 cents each. Address all orders and communications to the manufacturers.

H. W. EAMES & CO.,  
Milford, Mass.  
Preserve this advertisement for future reference and send for samples before you start your building and repairs.

Mention American Florist.

Delegates to the next THE convention will travel Pullman Car Line via the



TO AND FROM  
Louisville, Indianapolis, Cincinnati and the winter resorts of Florida and the South. For full information address

E. O. McCormick, Gen. Passenger Agt., Chicago.



## FOR THE TRADE. FLORAL WIRE DESIGNS.

JAS. GRIFFITH,

THE PIONEER MANUFACTURER IN THE WEST,

305 Main Street, CINCINNATI, OHIO.

SEND FOR WHOLESALE PRICE LIST.



## M. M. BAYERSDORFER & CO.

56 N. 4th St., Philadelphia, Pa.,

Manufacturers and Importers of

## BASKETS\* AND\* FLORISTS'\* SUPPLIES.

A large variety of Baskets for

## COMMENCEMENTS.

## Ed. JANSEN,

Manufacturer of

## NOVELTIES IN BASKETS

FOR FLORISTS,

124 WEST 19TH ST., NEW YORK.

SPRING STOCK NOW READY.

## SOMETHING NEW.

Look for us at the Convention.

## Philadelphia Immortelle Design Co.,

904 Filbert St., Philadelphia, Pa.



ONLY POTTERY MAKING A SPECIALTY OF

## FLOWER POTS

FOR FLORISTS.

## THE WHILLDIN POTTERY CO.,

713 & 715 W. HARTON ST.,

PHILADELPHIA.

## BARBED

## GLAZIER POINTS

WITH OR WITHOUT LIDS.

Pat. in April and May, 1888.

No more CLIMBING OVER the glass.

NEW MODE OF SETTING,

Commencing at the top instead of the bottom.

These points hold better than all others. No. 1 will hold glass 10x18, and No. 2 will hold glass 18x24, not allowing it to slide within in five years.

Glass fastened with them, and the methods of using these points, will be fully shown at the coming

— FLORAL EXHIBITION —

In New York in September next.

FOR SALE IN

BOSTON, MASS., by Wm. J. Stewart, 67 Bromfield St. NEW YORK, by Peter Henderson & Co., 35 and 37 Cornhill Street.

CHICAGO, by J. C. Vaughan, 145 W. Washington St. Retail without lip 50c., with lip 75c. per 1000. Finest 85c. Liberal discount on large orders.

## B. B. CHANDLER,

Patentee and Manufacturer,

HYDE PARK, MASS., U. S. A.

OUR NEW TRADE

## DIRECTORY

Contains over

6,000 Names of (Live)

Florists, nurserymen and seedsmen, in the United States and Canada.

PRICE ONLY ONE DOLLAR.

AMERICAN FLORIST CO., Chicago.

ESTABLISHED, 1866.

## Floral Wire Designs,

Manufactured by

## N. STEFFENS,

335 East 21st Street, NEW YORK.



## Florist's Letters.

PATENT APPLIED FOR.  
These letters are made of the best Immortelles, wired on wood or metal frames with holes to insert toothpicks.

Prices on Wood Frames:  
24 in. purple... per 100, \$1.00  
24 in. white... per 100, \$1.00

Send for sample. Postage 11c. per 100. Script lettering on Metal Frames any word, 5c. per letter.

Designs, Monograms, Etc.

W. C. KRICK,

1107 Broadway, Brooklyn,

New York.

M. M. Bayersdorfer & Co.,

Phil., Agts. for Penna.

J. C. VAUGHAN, Chicago

Agts. west of Pennsylvania.

## SYRACUSE POTTERY CO.

Sells Flower Pots by the crate only, and ships all over the U. S. Try a crate. Samples in first crate.

PRICES PER CRATE, CASH WITH ORDER:  
3 1/2" round, \$8.00; 4 1/2" round, \$9.50;  
2 1/2" 24-inch, 8.00; 4 1/2" 4-inch, 4.75;  
1 1/2" 24-inch, 7.25; 3 1/2" 4-inch, 3.50;  
1 1/2" special 3-in., 6.00; 2 1/2" 6-inch, 4.40;  
1 1/2" 3-inch, 5.50; 10 6-inch, 3.50.

A crate weighs 400 lbs. and goes at buyer's risk and freight. Send for list, rates and prices of 17 ready packed crates, and of mixed crates packed to order. We ship same day cash orders. Send P. O. order to

J. N. PERKINS, Manager, Syracuse, N. Y.

## D. C. SCHOFIELD,

— MANUFACTURER OF —

## Improved \* Greenhouse

## \* FLOWER POTS \*

NEW BRIGHTON, PA.,

Offers to the Trade the BEST

Quality of Improved Shoulder Pot in the market at the

LOWEST PRICES EVER OFFERED.

SEND FOR PRICE LIST.

Orders will receive prompt and careful attention and satisfaction is warranted in every respect.

## HAND TURNED EARTHEN WARE

Price List for 1888.

2 1/2" inch... per 100, \$5.50 8-inch... per 100, \$5.50  
3 1/2" inch... " 48 3-inch... " 8.75  
4-inch... " 88 10-inch... " 8.00  
6-inch... " 1.28 12-inch... " 23.40  
8-inch... " 2.30 14-inch... " 26.00  
7-inch... " 3.75 16-inch... " 100.00

No charge for package or cartage. Send \$1.00 for sample barrel before purchasing elsewhere. All orders will find it to their advantage to do so, as we make the best and strongest ware in the market.

Terms cash. Address all communications to

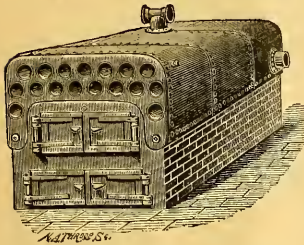
HILLFINGER BROS., Fort Edward, N. Y.

ESTABLISHED 1854.

## Devine's Boiler Works

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers.



Capacity from 350 to 10,000 feet of four-inch pipe.  
Send for New List.

PETER DEVINE,

387 S. CANAL ST.,

CHICAGO.

## Ives' Putty Machine.

Patented Jan. 8, 1887.

The best device ever invented for laying putty. With this you can make old leaky sash perfectly tight without removing the glass. It will do the work of five men in bedding glass.

Sent by Express on receipt of price, \$3.00

J. H. IVES, DANBURY, CONN.

## HALES' MOLE TRAP

For destroying ground moles in lawns, parks, gardens and cemeteries. The only PERFECT mole trap in existence. Guaranteed to catch moles where all other traps fail. Sold by seedsmen, Agricultural Implement and Hardware dealers, or sent by express on receipt of \$2.00 by H. W. HALES, RIDGEWOOD N. J.

## Conservatories

GREENHOUSES, ETC.

Erected in any part of the U. S. or Canada.  
Glazed on the

Helliwell Pat. Imperishable System

OR WITH PUTTY.

For further testimonials, illustrated catalogue or estimates address

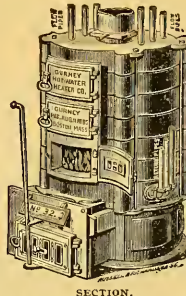
JOSEPHUS PLENTY.

HORTICULTURAL AND SKYLIGHT WORKS.

Offices, 124 Pearl Street,

NEW YORK.

HOT BED SASH.  
VENTILATORS.  
WRITE FOR PRICES.  
SASH OF FULL SIZE  
PINE OR CYPRESS.  
WE CARRY A FULL STOCK OF  
12, 14 and 18 foot lengths.  
JOHN L. DIEZ & CO.,  
530 No. Halsted  
Street,  
CHICAGO.



SECTION.

## GURNEY HOT-WATER HEATER

— [FOR WARMING] —  
RESIDENCES, OFFICES, PUBLIC  
BUILDINGS, CONSERVATORIES, ETC.,

HOT-WATER CIRCULATION.  
Have you investigated the Gurney system of heating by Hot Water? If not, it will pay you to do so. Send for our Illustrated Descriptive Catalogue, free to all.

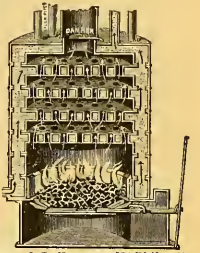
MANUFACTURED BY  
GURNEY HOT WATER HEATER CO.

OFFICE AND SHOWROOM:

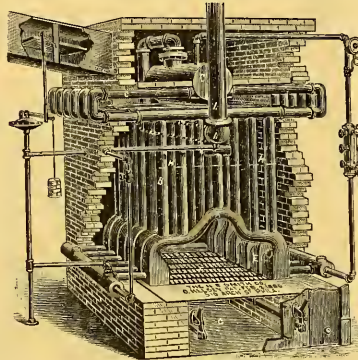
237 Franklin Street, BOSTON, MASS.

SELLING AGENCIES—M. H. JOHNSON, 140 Centre St. N. Y.; RICE & WHITACRE MFG. CO., 42 & 44 W. Monroe St. Chicago, Ill.; T. R. CHASE, 31 Edmund Place, Detroit, Mich.; WILLIAM GARDNER & CO., Portland, Oregon; J. L. FAIRBANK, 526 Fifth St., Covington Ky.; VALK & MURDOCH, Charleston, S. C.

IT PAYS TO DO WORK EARLY.



ELEVATION.



ESTABLISHED 1853.

— THE —

## O. K. STEAM GENERATOR

Is especially adapted to warming

GREENHOUSES, GRAPERIES  
AND CONSERVATORIES.

Special features insure

Economy, Simplicity, Durability,  
BURNS SOFT COAL OR WOOD,  
Giving best results with least labor and fuel.

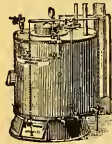
SEND FOR DESCRIPTION.

THE M. B. SMITH CO.,

510 Arch Street,

PHILADELPHIA, PA.

Mention American Florist.



# Reduce your Coal Bills

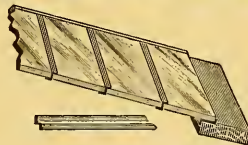
## THE FURMAN STEAM HEATER

ESPECIALLY ADAPTED FOR WARMING GREENHOUSES.

Gives a most uniform heat night and day. Can be run with less attention, and a SAVING of fully 20 to 25 Per Cent. in Fuel over any other method. Burns HARD or SOFT COAL. Endorsed by leading florists. Send for full Illustrated Catalogue. Address HEREDEN MANUFACTURING CO., GENEVA, N. Y.

IMPROVED GLAZING.

J. M. Gasser's Patent Zinc Joints,



For butting glass without laps; makes it air and water tight; saves fuel and glass. No breakage from frost. Also the best improved Fuel Oil Burners for steam boilers. Send for sample and price list.

J. M. GASSER,

101 Euclid Avenue, CLEVELAND, O.

## SASH BARS

VENTILATORS, RIDGES, GUTTERING  
AND LUMBER.

NO WIDE-AWAKE FLORIST need be told  
it will pay him to use Sash Bars, etc. made from

CLEAR CYPRESS.

Bars all Shapes up to 20 feet long.

Send for circulars and estimates.

LOCKLAND LUMBER CO.,

LOCKLAND, HAMILTON CO., OHIO.

## PIPE AND FITTINGS FURNISHED

— TO —

PLANS AND SPECIFICATIONS.

Contracts solicited for

HEATING GREENHOUSES.

Most improved plans.

ALL WORK GUARANTEED.

Prices furnished on application.

E. A. STIMSON &amp; CO.,

No. 22 and 24 Sears Street,

DAYTON, OHIO.

## GOLDMAN'S ATOMIZER

FOR A THOUSAND AND ONE USES.



Practical  
and Useful.

You will  
not part  
with it.

For Flowers, Window Gardening, House Plants, Destroying Insects, and for various fine sprays. Most natural substitute for fog or dew. By dipping in water while closed, fills instantly. Ball amply perforated; spray controlled by pressure of hand. Size of lemon squeezer. Weight, 3 or 4 lbs. Exclusive Territory to Agents. Sells on its own merits; no talk. Sample by mail, 50 cts. This is the Atomizer that sold so well at the Danbury, Albany and other fairs. Florists and Seedsmen, show it to your customers; sell fast; good profit. Excellent for indoor plants. Send for illustrated pamphlet and price to the trade. Mention this paper.

M. GOLDMUN, Manufacturer, Pittsfield, Mass.



## Index to Advertisers.

Adlam, H. W.	532
Advertising Rates, etc.	537
Allen, W. S.	527
Bayersdorfer, M. M. & Co.	536
Beard, E.	525
Berger, H. H. & Co.	525
Blanc, A.	531
Borbove, G. & Bro.	534
Royson, Jas. L.	525
Brackenkridge & Co.	525
Brague, L. B.	534
Brothers Lind & Gard's	529
Burg, Paul & Sons.	521
Chandler, B. H.	536
Clark, G. R. & Co.	529
Cook, J.	525
Cranston, Jnn & Co.	534
Currie Bros.	530
Carwen, John F.	534
Duacke, H. A.	533
De Veer, J. A.	527
Dexline, Peter	527
Dier, John L. & Co.	537
Dillon, J. L.	527, 529
Dinees & Conard Co.	525
Dreer, H. A.	529
Dunkley, Joseph.	535
Eames, H. W. & Co.	535
Edwards, S. & Son.	535
Killott, B. A. Co.	533
Farfield, C. F.	525
Fassett, F. R. & Bro.	529
Fisher, Peter.	533
Garfield Park Rose Co.	527
Gasser, J. N.	537
Giddings, A.	531
Giddman, M.	537
Grey, Benj.	535
Griffith, Jas.	536
Grith, N. S.	535
Guernsey Heater Co.	537
Hahman, F.	529
Hales, H. W. & Co.	537
Hallcock, V. H. & Son.	531
Hammond, Benj.	527
Hammond & Hunter.	527
Hargadine, R. W.	529
Herendeen Mfg. Co.	527
Herr, Albert M.	535
Higley, Henry G.	532
Hillinger Bros.	530
Hitchiner & Co.	528
Honker, H. M.	533
Hulsebosch Bros.	525, 531
Iren, J. H.	537
Jansen, Ed.	531
Joosten, C. H.	530, 535
Kadletz, J.	525
Kennicott Bros.	527
King, James.	531
Krick, W. C.	536

**SALINA, KAN.**—The Salina Floral Co. has succeeded John Buchi. Mr. B. retires from the florist business and has gone to Europe to spend a year.

**BORDENTOWN, N. J.**—E. D. Sturtevant, the well known grower of choice aquatic plants, has started a plant growing establishment on the Lick tract at Los Angeles, Cal.

**LEXINGTON, KY.**—Trade very good this spring. W. S. Bell is building a new rose house 100 x 20. Mrs. D. Houaker has completed a new smilax house and will rebuild two houses this fall.

**JAMESPORT, N. Y.**—The bulb and seed business heretofore carried on under the firm name of C. L. Allen & Co., office at Garden City, N. Y., will hereafter be conducted by C. H. Allen (the Junior member). Mr. C. L. Allen has connected himself with the A. B. Cleveland Co., New York.



## GREENHOUSE HEATING AND VENTILATING.

Superior Hot Water Boilers.

**JOHN A. SCOLLAY,**  
74 & 76 Myrtle Ave., Brooklyn, N. Y.  
Send for Catalogue.

## GREENHOUSE HEATING.

BY A. D. POWLER.

Explains fully all the best systems of heating greenhouses by both hot water and low-pressure steam. Tells you the points to consider in selecting an apparatus. How to adjust same to various locations; gives the results of the latest scientific experiments. Shows how to compute the number of feet of pipe required for a given space; draft and other important matters.  
Is highly commended by Mr. John Thompson and others. Postpaid, 5c.

Sent on receipt of price. Address,  
**AMERICAN FLORIST,**  
CHICAGO.



Sectional View.

## IMPROVED BOILERS

FOR HEATING

## GREENHOUSES

GRAPERIES, POULTRY-HOUSES, ETC.

ALSO FOR HEATING

WITH HOT WATER UNDER PRESSURE.

VENTILATING APPARATUS

For Raising Sashes in Greenhouses.

**GALVANIZED SCREW EYES**

And Wire for Trellis Work.

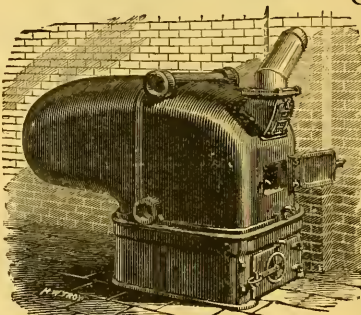
Send for Catalogue.

**Thos. W. Weathered,**

46 & 48 MARION ST., N. Y.

## Greenhouse Heating AND Ventilating HITCHINGS & CO.

233 Mercer Street, New York.



Send 4 cents postage for Illustrated Catalogue.

## Improved Hot Water Boilers

For Heating

Greenhouses, Graperies,

CONSERVATORIES, ETC.

ALSO

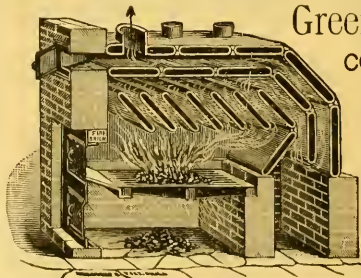
Cast Iron Pipe, Fittings, Valves and  
all Material for Heating by  
Hot Water.

Send for Catalogue.

**MYERS & CO.**

1173 So. 9th St.,

PHILADELPHIA.



## THE CELEBRATED WILKS WATER HEATER!

For Heating

GREENHOUSES,

DWELLINGS,

POULTRY HOUSES,

STORES, BATH TUBS,

ETC., ETC.

Send for Price List.



**S. Wilks Mfg. Co.,**

Cor. Monroe & Clinton Sts., Chicago.



ALL SIZES OF SINGLE AND DOUBLE THICK

**GLASS FOR GREENHOUSES.**

ALL GLAZIERS' SUPPLIES.

Write for Latest Prices.  
Mention American Florist.

# THE AMERICAN FLORIST



America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to reach the Unknown Seas."

Vol. III.

CHICAGO AND NEW YORK, JULY 15, 1888.

No. 71.

## THE AMERICAN FLORIST

Copyright, 1887, by American Florist Company.  
Entered as Second-class Mail matter.  
Published on the 1st and 15th of each month by  
**THE AMERICAN FLORIST COMPANY.**  
GENERAL OFFICES, 54 La Salle Street, Chicago.  
EASTERN OFFICE,  
Room 15, Vanderbilt Building, New York.

All communications should be addressed to the  
general office at Chicago.

SOCIETY OF AMERICAN FLORISTS.

FOURTH ANNUAL MEETING

—AT—

New York, August 21, 22, 23, 1888.

WM. J. STEWART, Secretary,  
67 Bromfield St., Boston, MASS.

### THE MEETING

Will be held in

COOPER UNION HALL,

At the junction of Third Ave., Fourth Ave. and  
Eighth Street, and the

EXHIBITION IN NILSSON HALL,

Fifteenth Street, between Third and Fourth  
Aves.; not in the Fifth Avenue Theatre as  
previously announced.

### The New York Convention.

But a little more than a month will elapse before those who will attend the fourth annual meeting of the S. A. F. will start for New York city. In the intervening time arrangements must be made to the end that nothing shall be neglected during our absence. Arrange your work now in such shape that you can rest contented while away, and thoroughly enjoy your trip, for the annual gatherings are to afford recreation as well as benefit in a business way. Attendance at a national gathering of this kind always broadens our views, and benefits us both mentally and physically.

The convention will be held in Cooper Union hall, at the junction of Third avenue, Fourth avenue and Eighth street, while the exhibition will be held in Nilsson hall, Fifteenth street, between Third and Fourth avenues. There will be ample room for all exhibits, not only in plants and flowers, but for all kinds of appliances appertaining to the trade. This change in halls has been made by the local committee since the society's programme was mailed.

The space set apart for cut flowers, plants and designs will be free of charge to exhibitors. In the section reserved for florists' supplies and requisites exhibitors will be charged a rental for each display. Those desiring to exhibit should correspond at once with John Thorpe, Pearl River, New York, who

will give particulars and all information relating thereto.

The headquarters of the society will be at the Fifth Avenue Hotel. The committee having in charge the matter of hotel accommodations found it difficult to get special rates from any of the large hotels in the city because all the proprietors and managers claim that August is one of their busiest months and with the exception of the Fifth Avenue and Gilsey they could not even promise to accommodate a large number at their regular rates. The following table gives the names, location, capacity and rates of the various hotels convenient to the place of meeting:

Hotel.	Can accom-	Am. plan.	European
Grand Central,	moderate.	per day.	plan.
673 Broadway,	100	\$2.50-\$3.50	\$1.00-\$1.50
Morton House,			
Broadway & 14th	400		\$1.00
Fifth Avenue,			
Broadway & 23d,	400	\$4.00	
Coleman House,			
Br'way & 27th, limited.			\$1.00-\$1.50
Sturtevant House,			
Br'way & 28th,	50-75	\$3.00-\$3.50	\$1.00-\$3.00
Gilsey House,			
Br'way & 29th,	300-400		\$1.00
Grand Hotel,			
Br'way & 31st,	50		\$1.00
Hotel Royal,			
6th Ave. & 40th, limited.			\$1.00
Gidney House,			
Br'way & 40th, limited.			\$1.00
Rossmore Hotel,			
Br'way & 41st, limited.	\$2.50-\$3.00		
St. Cloud Hotel,			
Br'way & 42d, limited.			\$1.00

Delegates wishing to secure rooms at any of the above named hotels can do so by writing to Theo. Roehrs, 153 West 31st street, New York: and if bodies of delegates coming will advise Mr. Roehrs at what hour and by what route they will arrive in New York, arrangements will be made for members of the New York Florists' Club to meet and escort them to the hotels.

WESTERN FLORISTS who intend going to the New York meeting of the Society of American Florists next month, should arrange to travel from Chicago on the special train with the Chicago club.

DUES FOR 1888.—Dues may be forwarded to Wm. J. Stewart, secretary, 67 Bromfield street, Boston, Mass., before the meeting and thus lighten the secretary's duties and avoid the rush at New York.

IF YOU are going to exhibit at the New York meeting, call the special attention of the trade to your exhibit through the columns of the CONVENTION SUPPLEMENT which will be mailed with the issue of August 75, next.

THE OFFICIAL PROGRAMME of the S. A. F. for the New York meeting has been issued and is probably now in the hands of nearly all in the trade. Those who have not received one will receive it upon application to Secretary Stewart. The programme will also be found in our con-

vention supplement which will be mailed with the August 15 issue.

### New York Notes and Comments.

Julio Lachaume, of the Jardin de Aclimatacion at Havana, has been making his annual sale through Young & Elliott. Among his plants were some interesting and handsome new aralias, one of which has been named in his honor by the *Revue Horticole*. Dracaenas are among Mr. Lachaume's specialties, though his sales usually include a variety of tropical stuff.

The Philadelphia grower who gave the receipt for kerosene emulsion published some little time ago in the *FLORIST* says that unless the whale-oil soap is pure it will not form a perfect emulsion; it curdles instead of mixing into a cream. There is, however, no trouble with pure soap; if anyone fails to make the mixture he must blame the adulterators.

Apparently the red carnation has been adopted by floricultural Democrats as the emblem of their party, so the Republicans suggest on their part the rose; presumably American Banner. Highly appropriate, and this particular variety would prevent any imputation of Anglo-mania. A good many will echo the remarks of your Glen Cove correspondent who says that though he once voted against hail insurance he will never do it again. We are all becoming reconstructed on that score, since experience proves that any one special hail belt is a fiction. But a good many more would feel that they could afford this insurance if it covered any damage by storm. We don't expect that phenomenal storm of last March to appear every year, but it would be reassuring to know that if it did we could receive some compensation for our shattered houses. It is hardly right to expect, however, that this organization, though an exceedingly lusty and promising infant, could take so much upon itself until a little stronger. One trouble is that so many florists who feel as if they couldn't afford to pay for it; everything over and above their running expenses must go into more and better greenhouses. Not always the wisest proceeding, for we see a good many cases where a few houses, well cared for, pay twice as well as a larger range with more financial leaks; it is like the little farm well tilled that the agricultural writers so often talk about. Certainly, every additional entry into the hail insurance society lessens the expenses for all in it.

The Rose and Strawberry Show of the Farmer's Club was but slightly noticed by florists. Mr. J. G. Bebus exhibited some nice roses, the Bride especially good. John Henderson showed some also, which were not for competition. Madame de Watteville was fine, though



it soon showed the effect of the heat. The color of Papa Gontier seemed to stand the warm weather better than that of most teas. Someone who had not sufficient courage to publish his name showed some outdoor Her Majesty; they were about the size of Mermet, but not so well colored. But we hear from many places that this variety is really superb outside; everything that we hoped for but rarely realized under glass. Mrs. John Laing did not appear at this show, though its size and color must give it a leading place among summer varieties of its class. Amateur exhibitors at this show confined themselves chiefly to the old-fashioned varieties.

Outdoor roses were past their best much sooner than usual this season; a few scorching days fairly withered them, in spite of the wet spring. But perhaps it is just as well that flowers are not over-abundant, for the retailers say that they have nothing in the world to do except improve their minds with campaign issues and wish they were at a summer resort. Growers are busy enough preparing for next season. If there was an over-production of roses last winter it is not likely to be lessened the coming season, for a tremendous amount of planting is being done. Each grower is increasing the amount of his most profitable stock and curtailing the less satisfactory, but we can hardly find any two who agree on this point.

"Growing and Forcing Cornelia Cook" on page 518, shows both practical reason and science; we were not aware before that the Hon. Wm. M. Evarts was such a competent authority on horticultural questions.

Mr. Hodgson has moved most of his establishment to Newport, his usual custom at this season. He is said to have some fine aquatics at that place. Speaking of aquatics it is not by any means absolutely necessary to have a pond or place of running water to grow the lotus successfully; some of the finest I have seen were in a cemented tank, which was filled up each day, as it evaporated.

EMILY LOUISE TAPLIN.

#### London Notes.

The past week has been worthy of note in the floral world. June 6 there was the evening promenade and floral fete, an entertainment given in Covent Garden flower market in aid of the gardener's orphan fund, and secondly the orchid exhibit at the Irish Exhibition. The floral fete was unique in its way as it was held in the new flower market of Covent Garden. This market is one of the sights of London and has never before been visited by so many of the representatives of London society as on this occasion. Many thousand invitations were sent out, no tickets being sold but subscription boxes were placed in prominent parts of the market, and attended by young ladies in evening dress. The fete commenced at nine in the evening and continued until twelve, and between these hours was thronged by the elite of London society. The flower market where this fete was held is the new part of Covent Garden market, and is now used for the sale of plants and flowers. The huge market hall was brilliantly illuminated for this occasion, and the blooming plants were arranged tier above tier in masses of fragrant blossoms. Nearly all the plants exhibited were grown within a few miles of London and it is estimated were sold the next morning for over £8,000 or \$40,000. Each lot

of plants was exhibited by the owner of the stand in the market and attended by their salesmen. Many fine plants of pelargoniums, Marguerites, iris, narcissus, pansies, etc., all the choicest of their kind were shown. The band of the Royal Artillery, one of the best in London, provided the musical part of the entertainment and were ensconced in the center of the market in a bower of blooming plants and palms. This fete has received a great deal of attention as Covent Garden is one of the old historic places of London and rich in associations of the days of Johnson, Garrick and Thackeray.

Another event of interest was the display of choice orchids at the Irish Exhibition at Olympia, West Kensington. These were kindly loaned by J. T. Peacock, Esq., of Sudbury House, Hammer-smith. The display was exceedingly good, all the plants being well grown, in good condition and flower and well arranged. We noticed some very good specimens of *Cattleya Mendelli* (light varieties magenta and pure white) the flowers of which measured over five inches in diameter, also some very good specimens of the same variety in purple and magenta over six inches in diameter. We also noticed some choice specimens of *Odontoglossum vexillarium*, *Odontoglossum Alexandrae*, *Cypripedium Stoneii*, and *C. Lawrenceanum* which were well up to the mark. The specimens of *Masdevallia Harryanum* and *Odontoglossum Roeblii* were in splendid condition and worthy of notice. For a private collection the exhibit was exceedingly good and has attracted the attention of a number of connoisseurs in this high art in flowers.

London, June 16.

#### Long Island Plant Notes.

BY WM. FALCONER.

ZIRNGIEBEL'S Improved Trimardeau pansies are the largest I have got; they are immense. While the Odier and Cassier pansies may be more beautiful and regular in outline, these mammoth Trimardeau pansies no doubt will, on account of their big faces continue to be the most popular.

STRIPED PANSIES.—Under the name of "Viola tricolor maxima—Kömer's Superb Giant Prize Pansy, striped," I had some seed from Young & Elliott. The pansies are very large, of good form, fine thick substance and velvety, and mostly of dark self colors striped with paler shades. This is really a superb and striking variety.

"NEW GERMAN" PANSY.—I had this from Burpee. The flowers are of good size and fine round form, very dark in color and unusually thick and velvety in texture. The "face" marking is defined in all the flowers, but so obscurely as not to interfere with the self black-like appearance of the pansies. A very distinct and beautiful flower.

LANGWATER GARDENS.—This is the name by which the beautiful home grounds of Mr. F. L. Ames, of North Easton, Mass., is now known.

THE DOUBLE FLOWERING scarlet form of *Lychnis Chalcidonica* is the finest variety of this old-fashioned border plant and one of the finest of all hardy plants.

KÄMPFER'S IRISES FROM SEED.—Two years ago I was very particular in saving seed from an uncommonly fine marbled variety, and as soon as they were ripe I gathered and sowed them. The seed-

lings now are in bloom and while marbled varieties prevail among them there is not one exactly like the parent, and several have blue, purple and violet self-colored blooms and one has white flowers.

KÄMPFER'S IRISES FROM JAPAN.—Of the consignment of these we received direct from Japan last winter, some of the plants are now in bloom, and they are not a whit better than the old sorts we had before, indeed, some of them aren't as good.

WHY IS IT that so many of the people who suggest to us, yes, even tell us, what species or varieties of plants to use in hybridizing or cross-fertilizing in order to obtain certain results, positively refrain from doing or attempting to do the work themselves?

WHITE PHLOX DECUSSATA.—A year or two ago I had a very fine variety from John Thorpe. It came into bloom about the 22d of June, was in its best condition the first of July and is likely to last well till the 10th or 15th. People who wish for lots of flowers in summer should not omit the decussata or early-blooming section of our tall phloxes.

AMONG OUTDOOR flowers now (July 4) most in demand with me are sweet peas, white phlox (decussata), mignonette, heliotrope, white lilies, Kämpfer's irises, scarlet geraniums, golden coreopsis (lan-ceolata) and double white feverfew.

RED HAWKWEED (*Borckhausia rubra*) is a very common garden annual, and, when at its best, very pretty. I always raise some of it, but before now it never has been called for; this year, however, "it is just perfectly lovely" and I can't get enough of it. Probably it shall never again be asked for, and this is just how it is with a hundred other things.

BLUE FLOWERS.—People seek after bright, showy flowers of white, red, yellow or orange colors to use them as cut flowers, but I can't get up much enthusiasm for blue flowers, apart from violets and Kämpfer's irises. Even larkspurs are little cared about. Well, I shouldn't wonder if I might coax the fancy with *Vanda cærulea*.

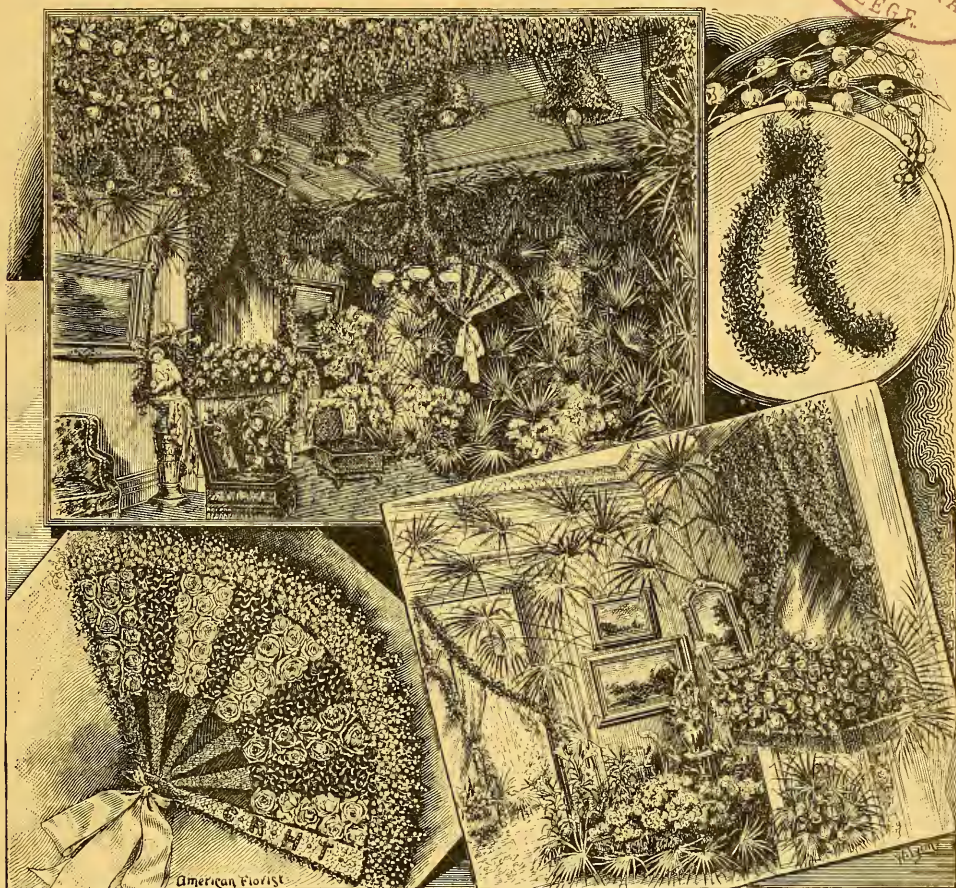
THE WHITE LAPAGERIA.—"The lapageria flowers were perfectly lovely and lasted beautifully. I wore them all day Sunday, and then kept them in water in a vase in the parlor all the week till Saturday, when I took them to New Jersey with me and they weren't stained a bit nor apparently any the worse." It was Flower Sunday in the village church and one of the teachers wanted something nice to wear. I gave her a spray of fresh open flowers of white lapageria, with above result.

PEACOCK POPPIES bloom early but the warm weather renders the flowers small and soon drives them past. They are indigenous to Turkestan and Afghanistan.

THE MIKADO POPPIES are like the deeply fringed Marseilles poppies, only the body of the flowers is white and the fringe rose, red or nearly scarlet. When, as a large proportion of them is, they are intensely double they are very beautiful, but in their present condition many come single. More careful selection is needed.

HYMENOCALLIS (ISMENE) CALATHINA is now in bloom in the border. It is a Brazilian bulbous plant commonly known in cultivation as "Sea Daffodil." I had it from the Michel plant Co. last spring. The flowers are large, white, three or more in an umbel on a scape twelve to twenty inches high, and several scapes arise from each bulb. The flowers are





WEDDING DECORATION (PLATE NO. 1). ARRANGED BY J. V. PHILLIPS, BROOKLYN, N. Y.

very fragrant and have a crinum-like appearance, only the corona is larger than that of the flowers of many crinums. This is one of the most desirable garden plants that we have got, and as well adapted for amateurs as are gladioluses or tigridias, as we may lift the bulbs in fall, keep them dry over winter, and plant them out in spring.

THE GARDEN, June 23 last, tells us that a bunch of cut blooms of the lovely, large, white, single rose, *Rosa Sinica*, was exhibited at the Royal Horticultural society's meeting. Cherokee rose is the popular name of *Rosa Sinica*, and there is no other rose whatever known as the Cherokee rose. In our southern states it is one of our commonest roses, wild or cultivated, and most everybody who lives in or has at any time resided in the Gulf States, is perfectly familiar with the Cherokee rose, but very few apart from botanists would ever recognize it as *Rosa Sinica*. In popular gardening journals

well established English names should always be used, editorially at least, when speaking of common plants. Botanical names are absolutely necessary for all species of plants, and in order to avoid any mistake in the identity of a plant by the English name, the botanical one may be used parenthetically; but if a plant has not got a generally accepted English name, far better use the botanical name only, than manufacture an English name for the occasion or use one that is known only locally. And to show you how absolutely lost those of us who are only plain practical gardeners and florists get among botanical names, just look at this same case of Cherokee rose. European botanists (see Nicholson's Dictionary of Gardening, 1886) adhere to the name *Rosa Sinica*, Lindl.; on the other hand our American botanists (see Serevo Watson's History and Revision of the Roses of North America, 1885) retain Michaux's name of *Rosa*

laevigata. Well, what are we going to do about it? Stand by our American botanists, to be sure.

#### Wedding Arrangement.

On the upper left hand of the large picture is shown the front end of the parlor. Wall and windows are covered with palm leaves. A sort of slanting roof projects from this at the extreme top, nearly out to the fireplace, with alternating large and small scallops of smilax and vines edged with lily of the valley. Under this against the palm leaves were grouped azaleas, acacias and *L. longiflorum*. Between the windows is a fan five feet in diameter with panels of roses, smilax dividing each. The handle is of white immortelles with the groom's initials in blue on it. There is a jestooning of lily of the valley and a wide sash on the handle. The mirror has curtains of smilax pinned back with four leaved



clovers. The mantel is rose covered and the fireplace is partially screened with palms and roses. Across the center of the parlor is a flat arch which is filled in to represent a screen with vines and roses and a lily edging. Suspended from this is a row of bells of smilax with tongues of roses. Alternate ones are lower than others. The doors are covered with palm leaves and other greenery, and palms were gracefully arranged behind the pictures. Wishbones of smilax were suspended in doorways.

The lower right hand picture shows the corner of the rear parlor, with groups of azaleas, callas, lilies and palm leaves at base.

The smaller plate pictures the end drawing-room. The organ is covered with *L. longiflorum* and there are groups of azaleas, callas and *L. longiflorum*.

These decorations were arranged by florist J. V. Phillips, of Brooklyn, N. Y.



Planting.

The season is now at hand when all roses for next winter's blooming should be planted as quickly as possible, and in doing so there are four cardinal points to consider:

First: have good healthy vigorous plants. This is of vital importance, for no matter how good the other preparations may be they will not compensate for planting poor stock, and the difference between the cost of raising poor stock—though it might be done very cheaply—and that of raising strictly first class stock is really of very small consequence compared to the difference in the value of the yield of bloom during the next season. Anyone wishing to test this for himself can very easily do so by selecting a few really good plants and placing them at one end of the same house where the smaller or poor plants are used, and then count carefully the difference in the yield for the first two or three months. I venture to say the extra cost of the good plants will have paid itself back to the owner two or three times over.

Second: soil. This is of almost as much importance as the plants, and in selecting it care should be used to select the very best which circumstances will admit. The top soil (sod) three or four inches thick from an old pasture, with a tendency to be rather a heavy loam is really the best class of soil to grow roses, but it is not always possible to obtain such. Where the soil obtainable is of a light nature it is better to add a little clay if possible, and where very heavy lighten it up somewhat by the addition of burnt clay, sand or similar material; if the soil is of fairly good quality the addition of one part of good cow manure to seven or eight parts of soil is enough, but the quantity must be regulated by the requirements of the different grades of soil and the exact proportions can only be learned by experiments with the different grades. But it can be pretty generally concluded that a very light sandy soil will take and be improved by a much more liberal propor-

tion of manure, while the heavier soils may not need so much.

Third: drainage. All beds and benches should be well drained and the deeper the soil the more drainage is needed. In building benches it is always advisable to provide for this by leaving plenty of openings. For my own soil I find by experience that fully one-seventh of the whole bottom of the benches require to be open to secure this. I use strips six inches wide for the bottoms and leave a one inch opening between each strip. Over this I lay narrow strips of sod, which I find is the best for my shallow benches, but where deep benches are used then I would advise from two to three inches of broken brick, coarse coal ashes or a like material; this avoids getting the soil wet and sour during dull weather in winter.

Fourth: depth of soil in benches. When I began planting altogether in benches, I used from six to nine inches of soil according to the variety I wished to plant. From that time till the present day I have kept reducing the depth till now not over four inches is used for anything, and last winter our best benches of plants were those growing in two and a half to three inches of soil. Though I would not advise every one to use as small an amount of soil I do advise them to give the shallow bench a fair trial in comparison with the deep benches. In my own case I find it is a great saving of soil and consequently of labor in carting in and out of the houses, with as good and in most cases better results than I can obtain from the deeper benches, so I consider that on the whole I gain considerable in favor of the shallow benches; where soil is difficult to procure this must be of great advantage to the grower. Even in this shallow bench a plant has a great deal more soil than can be put into a 12-inch flower pot and most florists will concede that a good sized rose bush can be grown in a 12-inch pot. To illustrate this and make myself more clearly understood: If a plant on a bench occupies a space one foot square (a small space for a healthy plant) that plant will have 432 cubic inches of soil to grow in if the soil is three inches deep, while in a 12-inch pot I never could get more than 265 to 275 cubic inches of soil in after giving a fair amount of drainage, so that it is quite clear that we give a plant even in the shallowest bench more soil to grow in than it really needs. Another great advantage with the shallow bench is that the roots are all near the surface and can easily be fed at any time, and are always of easy access for the influence of air, etc., which is unquestionably of great benefit to the plant.

Summit, N. J.

JOHN N. MAY.

ROSE CLEOPATRA.—Mr. H. Bennett, of the Pedigree Rose Nursery, Shepperton, has sent us flowers of this new seedling tea rose, gathered from plants grown in the open ground and without any protection. This variety will add still further to Mr. Bennett's reputation, as it is one of the finest we have seen in its line of color. There is a robustness of character in both stem and flower, and the beauty of the massive bloom will be hard to eclipse. It is full, dense, and brightly colored, the strong firm petals delicate rose, with flakes of a deeper tint in some instances, the color becoming of a clearer shade in the beautifully arranged center. There is also a powerful tea fragrance, a point of no small importance. We want hardy tea roses like the variety Cleopatra.—*London Garden.*

#### Notes on Natal Plants.

Too often Cape bulbs are thought to come from any and every part of South Africa, but this is not so. The south-western floral district stretches, a narrow belt of country from Cape Town to Algoa Bay. Within these boundaries, with a wet autumn and spring and dry summer the strictly "Cape Bulbs" flourish mostly in sandy soil. From Algoa Bay passing up to Port Natal (Durban) we encounter a different climate—a wet summer and dry winter. Maritzburg, with which locality I am now to speak is situated fifty miles inland at an elevation of 2,200 feet. The mean temperature is 64° Fahr., six degrees hotter than that of Paris. The mean rainfall is thirty inches, of which three quarters falls in the six summer months, September to February, when the thermometer is rarely over 80° in the shade. In winter the temperature is rarely at freezing point and snow is only seen on distant mountain tops. Many of the below named plants are found growing amongst grasses in a heavy black fibrous loam which is moist in summer but never dries out in winter, at a mean elevation of 3,000 feet.

ANEMONE FANNINII.—A noble plant, the largest anemone known, found on grassy hill tops. Flower stems four to five feet high bearing one to three snow white flowers four inches across. Leaves deeply lobed often two feet across. Hardy in south of England.

ASPARAGUS PLUMOSUS.—Too well known to need description. Is found near the coast in sandy soil and hence requires more heat to develop it well. Amongst our forty species of nature asparagus many besides the above are well worth cultivation.

BEGONIA GERANOIDS.—A very pretty dwarf plant with dense clusters of white flowers, grows on shaded banks in leaf mold.

BEGONIA NATALENSIS.—About three feet high. Flowers orange-red. The stems are pink and make a good jam. Delights in crevices of moist shaded rocks.

CYRTANTHUS MEKENII.—A very pretty white flowered bulb, nearly evergreen and flowering in the winter and lasts well when cut.

CYRTANTHUS BREVIPLORUS.—Deep golden yellow. Flowers in early spring and grows in moist boggy places.

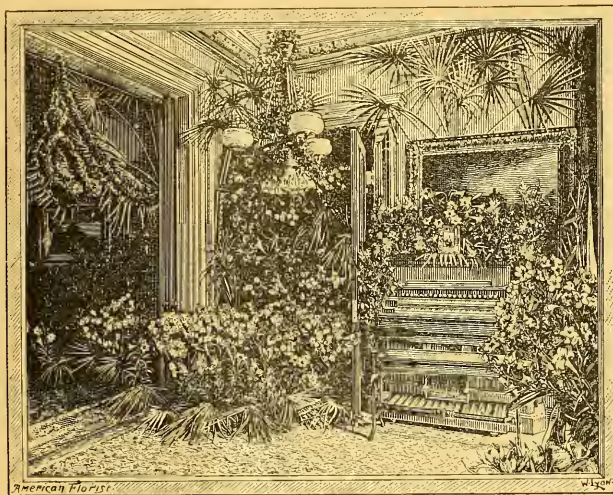
CYRTANTHUS ANGUSTIFOLIUS.—Flowers bright crimson, very bright and pretty. Is found in dry, stony places and blooms in early summer.

DIETES HUTTONII.—A rather showy plant with long narrow leaves and yellow purple striped flowers. Grows in black loam on river banks. There are several other good species of dietes which I have in cultivation but unnamed.

DRIMIA ALTESSIMA.—A huge bulb with laucolate leaves and a spike six to eight feet high of glistening white and green flowers. An imposing plant.

DISA POLYGONOIDES.—When well grown a very striking object. I have often seen this terrestrial orchid sending up a spike three feet high covered with 100 or 200 small pink and scarlet flowers. Its common name is red hot poker. It grows in black loam or even red clay in places where moisture is abundant, but never stagnates.

DISA MACRANTHA.—A really fine species, but rare. Flower stem two feet high. Flowers twelve to eighteen in number, about two inches across, white,



WEDDING DECORATION (PLATE NO. 2).

heavily blotched with purple and strongly scented. The large tubers delight in a rich black fibrous loam. This and the last named bloom in early summer.

**EULOPHIA DREGHII.**—Pseudo-bulbs just buried beneath the soil. Flower stem two feet long bearing about a dozen creamy yellow flowers near two inches across. At the base of the lip is a dark maroon spot. This is a handsome orchid flowering at midsummer and likes peaty soil.

**EULOPHIA ENSATA.**—Pseudo-bulbs flattened, lying well below the soil. Flower stem two feet high bearing at the top a dense cluster of tube shaped flowers of a deep golden yellow. This is a bright noticeable plant and stands cutting well. Flowers through summer and likes heavy soil. We have several other euphorias but the two above named are the best.

**GLADIOLUS AURANTIACUS.**—A fine golden yellow species, grows in rather dry places amongst stones and flowers in early spring. This plant was first sent by me to Max Leichtlin, of Baden Baden, three years ago.

**GLADIOLUS PAPILIO.**—A very gay showy species growing in swamps and flowering in early summer. Flowers pale purple, lower petals crimson and yellow.

**HÆMANTHUS ALBIFLOS.**—A white flowered species, grows in sandy soil near the coast and, like *Asparagus plumosus*, requires heat. Flowers in very early spring.

**HÆMANTHUS NATALENSIS.**—Here we have a very showy plant blooming in early spring and loving a moist situation. The flowers, which expand before the leaves, are nine inches across, orange yellow in color and encircled by blood colored spathe. The foliage is bold and handsome, often three feet high.

**HYPOXIS LATIFOLIA.**—Flowers yellow,

medium size. Foliage large and handsome.

**HYPOXIS ELATA.**—Flowers larger than the last, also yellow, quite worth growing. The tubers of this and the last named delight in heavy black loam.

**IMANTOPHYLLUM MINIATUM.**—If this fine plant is as well known in the States as in Europe description is needless. Evergreen, flowers really splendid, glowing orange crimson—admirably adapted for house decoration. Roots of this have been sent from this country to London and bore travel well. Blooms in early spring.

**LISSOCHILUS KREBSII.**—Pseudo-bulbs stout, conical, growing on the surface of the soil, leaves lanceolate. Flower stem four to six feet high bearing thirty to forty flowers about two inches across; sepals brown, petals white and yellow, lip pink. One of the very finest of our terrestrial orchids and worth a place in the most select collection. Grows in leaf mold or peat.

**MYRSOPHYLLUM ASPARAGOIDES.**—I only mention this plant to note where it grows best, on sloping banks in leaf mold, where moisture is abundant but never stagnant and partially shaded by the shrubs it climbs around. From time immemorial smilax wreaths have been used by our Zulus on all festive occasions.

**MONTBRETIA POTTSII.**—A very pretty gladiolus like plant with long spikes of crimson and yellow flowers, grows on the banks of mountain streams.

**NERINE FLEXUOSA.**—Flowers bright pink, fine for cutting from, grows in moist peat at great elevations; 4,000 or 5,000 feet in places where much winter snow falls.

**NERINE PUDICA.**—A very beautiful flower, white tinted with rose. Only found in swamps in company with *Gladiolus papilio*. These two nerines bloom in early summer.

**RICHARDIA AFRICANA.**—Callas are known to everyone. Always found growing in swamps. We have a species with a golden yellow spathe, and I discovered a species in the Transvaal with pink flowers, nearly the color of a Homer rose.

**SATYRIUM MILITARES.**—A pretty pink scented orchid, one of our earliest spring flowers and is found growing in black loam. Flower stem two feet high bearing fifteen to twenty flowers about half an inch across.

**SCILLA NATALENSIS.**—A large bulb growing on open hillsides with sheathing leaves and sending up a spike three to five feet high, of medium size, pale blue flowers. Well worth cultivation.

**SPARAXIS PENDULA.**—One of our most graceful flowers, being the counterpart of the drooping *Sparaxis pulcherrima* except that the flowers are snow white. Often grows five feet high, in black loam amongst grass.

**WATSONIA DENSIFLORA.**—This, the most lovely of our watsonias, will bear a considerable amount of cold since it grows on the slopes of the Drakensberg at an elevation of 5,000 feet. Spike often four feet high. Flowers very many, of a rich glowing majenta.

**WATSONIA MERIANA.**—A very fine species with orange flame colored flowers. Is found only on hill tops in the crevices of rocks.

R. W. ADLAM.  
Maritzburg, Natal, South Africa.

#### Water Rates.

In most cities florists who use city water are usually taxed quite heavily for water, it being imagined that florists use immense quantities of water, while in fact their consumption is small compared with brewers and manufacturers generally. In Chicago the assessment is based upon the number of feet frontage (whether entirely built up or largely vacant), the number of faucets in use and an additional charge is made for each horse kept on the premises. These items generally swell the water tax to quite a sum. One city florist has secured an equitable rate by having a water meter put in at his place and for the last two years has paid for what he got and no more, and has effected a considerable saving thereby. The year previous to putting in the meter his water tax was \$68, while the following year—during which his consumption of water was the same as before—his bill for water was but \$14. City florists who are being heavily taxed for water would do well to take the hint, have a meter put in and pay for what they get—no more, no less.

#### Average Life of Greenhouses.

Under the above heading in the last AM. FLORIST the average life of a greenhouse was placed at ten years. We think this average is too low. It may be the average in some particular establishments where paint is economized and poor material for the building is used, but if good material is used and properly painted and kept painted, we think the average could be placed at eighteen to twenty years. There are greenhouse sash in use in Louisville to-day that are in fairly good condition, that have been in use forty-five years and over.

Louisville, Ky. F. WALKER & Co.  
[We shall be pleased to hear from others with their views on this matter. We may have placed the term too low



but are still inclined to think it about right as a *general* average. We have seen greenhouses which were not more than seven or eight years old which we would not accept as a gift, because though they had not entirely fallen down, they were in such shape that nothing could be grown in them *with profit*, and it would cost as much to repair them so they could be *profitably* used, as it would to build new houses. Many florists heat houses every year which make a loss instead of a profit for their owners. Such houses are worthless of course. Houses can be made to last eighteen to twenty years if properly constructed and well taken care of, and we regret that all greenhouses are not so constructed and preserved, but unfortunately such is not the case.—ED.]



Summer Position.

Where plants are cultivated for the production of large blooms, they must of necessity be allowed to grow taller than when the plants are cultivated for any other purpose, as it is not possible generally to obtain flowers so good in quality from dwarf plants as from those which are allowed to assume a more natural mode of growth, allowing them to grow uninterrupted until additional shoots known to chrysanthemum growers as the "first and second breaks" are formed. If it were possible by any other means to obtain as fine flowers from dwarf plants, a boon certainly would be granted to cultivators. Unfortunately, this is not the case, and those who wish to have the very finest blooms must in a general way content themselves with plants which are tall.

The position which the plants are to occupy during the summer months should receive some consideration. What is needed is a place quite open to the sun's influences all day, and yet sheltered from rough easterly winds, which sometimes seriously check the growth. Another wind to be guarded against is that from the southwest, which so often blows with such force during the early part of September just at a time when the plants are forming their flower-buds, and in some cases where formed, they are entirely spoilt through being blown off or so severely whipped about as to cause injury to the delicate tissues of the skin, thus checking that regular even growth which is so essential to success.

Chrysanthemums grown for any purpose cannot well have too much sun, provided all other conditions are favorable. Therefore select the position with this view, and do not forget that plenty of sun is most essential to the proper ripening of the wood during September and the early part of October. At this time of the year the absence of sun upon the plants would have a most injurious effect, as the last growth requires ripening up thoroughly. The best of all positions is alongside of a path running east and west in the kitchen garden, for instance, which is generally walled in. Here the plants obtain the sun the whole day, and during the greater part it shines full on the foliage. One row on each side of a

broad path running north and south does very well. In this case it is wise to stand the pots just clear of the path, as the continual watering with liquid manure is apt to disfigure the gravel. In such a position, boards, bricks, or tiles should be employed whereon to stand the pots to prevent the ingress of worms, which cause sad havoc with the soil in the pots.

If the plants are arranged all together on one piece of ground, the rows should run east and west, and be at such a distance apart that the shade caused by one row of plants does not fall upon the row behind. A distance of five feet between the rows should be allowed. If the space at command is of the size to accommodate several rows running parallel with each other, the tallest plants must be arranged at the back with the dwarf ones in front. A knowledge of the relative height of each variety is necessary to effect this object. For the grower's observance of the growth and the better manipulation of each variety which has something peculiar in itself, it is a good plan to arrange all the plants of each sort together.

Those who are interested in chrysanthemums and wish to gain success will find it of advantage to note well for future guidance the different phases of growth. I should like to impress upon beginners the importance of this, as a thorough knowledge of each variety and its peculiarities can only be gained by close attention.

The height of chrysanthemums differs somewhat according to the treatment they receive. The excessively tall growth of some varieties goes a long way towards condemning the method practiced for the production of large blooms by some growers; still if flowers of the largest size and best quality must be secured, tall growth in some instances must be borne with, as, for example, Mme. C. Audiguier which is naturally a tall variety and one of the best varieties of Japanese flowers in existence.

Some growers plunge the pots, but this is not necessary unless in the case of plants grown as specimen or bush plants, where good foliage is especially desirable. I do not approve of the system, for the reason that in continuous wet weather which often occurs towards the end of September, it is difficult to know when the plants really do require water. Excess of moisture at the roots is as bad as too little. Some people think chrysanthemums cannot have too much water, but this is a mistake. I have seen plants denuded of a large portion of their lower leaves through receiving too much water at the roots. If the pots on the sunny side could have protection from the rays of the sun in continuous spells of dry weather by boards placed in front of the pots, I think this would be a considerable advantage both to the plants in keeping the roots cool and a saving of labor in the application of water.

It is better to stand the pots when in their summer quarters on boards, slates, or tiles, or even on two bricks placed nearly together, than upon a bed of ashes, as the roots penetrate through the bottom of the pot into the ashes for some distance in quest of moisture. I have seen the roots two feet away from the base of the pot. When the plants are removed indoors these roots are destroyed, thus considerably checking the plants. Worms, too, are not so liable to penetrate into the pots as they are when the pots are standing upon ashes. If the plants have of necessity to stand on ashes, care should be taken to have good drainage underneath. Provision must be made to

secure the plants from winds. This is best done by erecting a trelliswork to which the plants can be fastened. There are various means of effecting this; where stakes are used, as noted in a former issue, they will have been got ready. A framework of these can be put up which is strong, cheap, easily taken down, and stored during the winter. The stakes will last two or three years. The upright stakes should be of sufficient stoutness to prevent the plants swaying about, and placed at such a distance as their strength and the length of the cross rails necessitate. For the tallest plants three cross rails are required, while for the moderately tall-growing varieties two are enough, and one for the shortest plants. The method of tying the plants is in this way: the center shoot or growth after the first break has taken place is tied to a long stake fixed in the pot, the one on each side of the center growth being fastened to small temporary upright stakes secured from rail to rail. In this manner the plants obtain an equal share of light and sun, and when housed the shoots are tied loosely to the center stake. Secured thus, there is not the danger of breakage by wind or other causes; the lateral growths springing from the joints are more easily removed, and the under sides of the leaves are not so liable to be infested with mildew towards the autumn as they are when all the growths are huddled close together. Syringing, also, can be more effectively performed in this manner. Some growers stretch twine from post to post instead of the rails, but this soon becomes slack by exposure to the weather, and is not sufficiently firm to prevent the plants rocking to and fro.—E. Molyneux, in *London Garden*.

#### Flowers and Plants at Covent Garden Market, London.

Not twenty years ago the amount of cut blooms brought into Covent Garden was so moderate that no one thought it worth while to make a trade of selling them. The special flower salesman had no existence a few years ago. If you had flowers to dispose of you must either send them to a Central Avenue florist, who limited you to quantity, or you must get some grower in the flower market to sell, unless you took a stand in the flower market and sold them yourself. At the present time the grower of cut blooms may easily dispose of any quantity, and when I mention that there are nearly a dozen salesmen who occupy themselves specially with the sale of cut flowers, readers of *The Garden* will be able to justly estimate the proportions to which this branch of market gardening industry has attained in recent years. As regards pot plants, the inspection of one of the large market gardens in the vicinity of London would strike anyone acquainted only with those of a quarter of a century ago with wonder. Plants that were then grown by the thousand are now produced in hundreds of thousands. It is not uncommon to see 150,000 of one particular plant in one place, and so accurately does the grower gauge his powers of sale, that it is seldom any remain on his hands. Prices sometimes range low, but the trade goes on, and if the profit per plant is small, large quantities are disposed of.

It is owing to the facility for disposing of a large number of plants at small profits that the glass area devoted to this form of market culture has increased so wonderfully during the last few years. Although plants were grown very well



ADIANTUM GRACILLIMUM.

ADIANTUM CUNEATUM.



PTERIS CRETICA ALBO-LINEATA.

ONYCHIUM JAPONICUM.

## FOUR USEFUL FERNS.

for market a quarter of a century ago, the quality certainly averages much higher at the present time. The old lean-to houses in walled in gardens have given place to low span-roofs with large panes of glass, and the market grower of to-day cares but little for shelter so long as he can get an abundance of light. In a light structure quite away from buildings or anything that may keep off light and sun he grows his plants in a manner that was not practicable under the old conditions. In no one thing is the effect of this change more striking than in the pelargonium. Plants are now brought into Covent Garden in April in a condition that would have been thought to reflect high credit on the

grower of twenty years ago two months later. Not only is quality higher, but there is much greater variety. The old favorites generally have held their own in the competition for popularity with new comers; some, indeed, have advanced several steps. The cyclamen, in the days when Mr. Bruce and Mr. Drew were about the only growers, existed only in the form of a small-pointed petalled flower, the brightest tint being a dull pink. It is not much more than twenty years ago that Mr. Wiggins, who might justly be termed the father of the present race of this flower, obtained his first break from the old stereotyped forms. Could the cyclamen growers of a past generation see the change effected

in this flower they would consider it as little short of miraculous. The nature of the bouvardia was then so little understood that it was treated as a stove plant, where it grew up a couple of feet high, carrying a few small trusses of bloom, but often giving none at all. It took a good many years for the capabilities of the bouvardia as a market plant to be discovered. Another plant that suddenly obtained a high position is the tuberous begonia. I doubt if any plant ever attained to such great popularity in so short a time.—*J. Cornhill, in London Garden.*

## Four Useful Ferns.

We give illustrations in this issue of four ferns which should be grown for cutting from by every florist who does a general business. Their great usefulness lies in the fact that they grow rapidly, without any special nursing, and the fronds last well if cut when well ripened. A small section of bench planted with these varieties of ferns—the adiantums predominating in number—will pay well by furnishing a supply of graceful greenery which will add effect to every piece of floral work.

For those who need only fifty or a hundred plants, the best way will be to buy them in 2½ or 3-inch pots, and plant out on the bench—much the same way as carnations. While they should be protected from strong sun, too much shade, especially in winter, is an error frequently made. Those who wish to get up a stock themselves should consult an article on the subject by Robert Craig, page 91, No. 6, of Vol. I.

## The Baltimore Club Visits Washington.

June 26 will long be marked as a red-letter day on the calendar of the Gardeners' Club of Baltimore, that being the date of its visit to the places and objects of horticultural interest at the National Capital. Washington presents many notable examples of fine gardening in all its branches, and the excursion was intended to be one of an educational character, and its variations into relaxation and social enjoyment were due to the attention and warm-hearted hospitality of our hosts and conferees of that city who welcomed, guided and entertained us.

Taking an express train, the club, over fifty strong, under the leadership of Robert J. Halliday, its president, and James Pentland, the marshal of the day, reached Washington before 9 o'clock, being met by Mr. Wm. R. Smith, superintendent of the U. S. Botanical gardens, and his assistants, Messrs. Reynolds, Oliver and Ganges, who conducted its members through that establishment, containing so much to attract the plant lover, whether amateur or commercial, and all of which, as it seemed to those familiar with it, in completer order and better condition than ever before.

Of course your space would not admit of any reference to individual plants, or even groups or houses; but visitors to the gardens who inspect the palm house are recommended to imitate the example of several of the club and ascend the winding iron stairway which surrounds the central smoke stack and take a look downwards on the grand specimens which here rear their heads some fifty feet in the air. Such a view is, so far as we know, unique in this country, resembling a bit of transplanted tropical scenery. Others will be more interested



in the rich collection of insect-eating plants, which are here in number and variety, that argue an enthusiasm for these rare and curious Darwinian illustrations. Passing rapidly through the numerous houses waiting omnibuses were availed of and a hurried visit paid to the Capitol and the grounds about it; thence to the National Museum, and on to the Department of Agriculture, where the veteran William Saunders, superintendent of the experimental grounds and gardens, scarcely less robust physically and certainly not less cheery and enthusiastic than a score of years ago, met the club and escorted it in a rapid tour of the houses, which, as is generally known, are devoted largely to tests and the propagation of plants with present or prospective economic value. A large house planted in pine apples of numerous sorts was very interesting.

The point next visited was the propagating houses of the National Gardens where, necessarily—the bedding-out having been nearly completed—not much remained except the reservestock, which so enormous and varied planting as is done each year by Mr. Brown, the active and efficient superintendent, requires to be heavy. The White House grounds and conservatories aroused considerable enthusiasm and, whilst it was tacitly voted they were not such as would become the palace of a potentate they were not unworthy appendages to the home of the chief executive of the American republic. All departments spoke, by neatness, thrift and effective arrangement, of the skill and good management of Mr. Pfister, who has long had charge. The orchid house and the bedding-out, some new and graceful designs being observable in the latter, were commented on favorably.

Here ensued a drive around the public squares, with stops to allow of closer examination of noteworthy specimens of bedding-out, fine shrubs and trees, or other attractions of the gardener's art. The beds in Lafayette and Franklin squares were especially effective, and it was noted with general pleasure that not only were the designs more varied but that extremely satisfactory results were obtained without the use of the gaudy (and weedy) coleus, whose position is now thought by many to be relegated to the rear. The employment of echeverias, sedums, other succulents and of oxalis, enables the artistic worker to produce, with the aid of the many-hued alternantheras, more subdued but quite as telling effects as with the older and "louder" materials so long in vogue.

Then came dinner, which to all was welcome after the long round of sight-seeing. Some little time was devoted here to social enjoyment, the club being favored with the company (they were, indeed, in a measure the hosts of the day) of Mr. Wm. R. Smith, Mr. Freeman, vice president of the Association of American Florists, Messrs. Field, Oliver, Reynolds and Ganges. There was not much formality, but at the close of the repast Mr. Smith in an eloquent, appropriate and witty address of no great length, welcomed the visitors on behalf of the gardeners of Washington, and was responded to by one of the officers of the club in the place of Mr. Pentland, assigned to that duty, but who had unfortunately become disabled by illness.

Resuming seats in their conveyance the party was carried to inspect the Soldier's Home and to enjoy the magnificent prospect there afforded of the Capital, the Potomac and the Maryland and Vir-

ginia shores. On the route back to the Capital stop was made at Messrs. George Field & Bro., of American Beauty rose fame, and on whose premises that variety was found in all stages of growth and age. It was reported during the visit that these gentlemen are amongst those who have drawn substantial prizes in the boom of real estate in the suburbs of Washington, and that, after six years' possession, they have made a sale of their place at a figure which yields them a profit of \$40,000. So hospitably entertained here there was little disposition to seek "fresh fields and pastures new," but the programme laid down was inflexible and the club was hurried back to traverse the city and take the Bladensburg road to the greenhouses of Messrs. C. Strauss & Co. These are the marvel of the florist's trade in Washington. House after house is filled with fine, thrifty American Beauties, Puritans, Brides, Papa Gontiers, La France and a few other varieties. Steam heating is used and the smoke stack from the boilers is in size and height like the chimney of some great factory. Besides the present houses four others, each 30 x 200 feet are nearly completed. These also will be devoted to roses, though a lower story in each is to be utilized for forcing bulbs, or perhaps for growing mushrooms. Some novelties in construction and equipment might be dwelt upon here as having interest for the craft, but the length of this forbids lingering on those topics. Mr. Benj. Durfee, the head of this enterprising firm, had a royal lunch awaiting his visitors, to which full justice was done and for which the thanks of the club were tendered him and his charming wife, who with other ladies, graced the occasion by their presence.

A call at the greenhouses of Mr. William Clark in the vicinity completed the itinerary laid out, and about dusk the railroad station was reached, the club members delighted with the day, the variety and beauty of the sights enjoyed, and, above all, with the cordial and fraternal greetings which had welcomed them on every side. The trip was inspired, and all the preliminary arrangements were perfected by the devoted president of the club, Robert J. Halliday, and his efforts were appropriately recognized on the homeward trip.

WM. B. SANDS.

London, Ont.

Spring plant sales nearly 40 per cent. larger than last year, but prices were lower on nearly everything. An increased demand was noted for coleus, achyranthes and alternantheras. Geraniums, heliotropes and begonias in 4-inch pots retailed at 75 cents to \$1 a dozen; fuchsias 75 cents to \$1.50; tea roses \$1.50 to \$2; verbenas in 2½-inch pots 50 cents; coleus 75 cents; pansies from frames 25 cents to 40 cents.

Several members of the club have signified their intention of attending the convention, if a suitable rate can be secured. The club has made good use of the time since it was organized last fall; it has revised the Western Fair prize list, by recommending to the directors the necessity of placing in their list numerous other varieties of plants, cut flowers, vegetables, etc.; also the rearrangement of tables and benches in horticultural hall, which were adopted by the board, and exhibits can now be shown to their best advantage. At each meeting some subject is discussed which always proves interesting. The subject for next meet-

ing will be "Destructive Insects," by Mr. A. McInnes, who will illustrate his essay by specimens in their different stages of development.

W. C. & C. M. Greenway have asked their creditors for an extension of time.

C. Insell, an East End florist, has made a complete smash, his stock, etc. being sold at auction June 23.

#### Buffalo.

Weddings numerous during June, and most of all the florists had their hands full.

Outdoor season has been a week or ten days later than usual.

A continuous day and night hot spell between June 18 and 25 brought on outdoor roses almost faster than they could be cut. Faster than they were sold anyway, even at retail price of "Jaqu roses 35 cents per dozen," as has been conspicuously hung out on the awning of a prominent florist. That good goddess and savior of the business "Dignity," came to the rescue of the craft. However, as his action was not emulated to any noticeable extent by the other florists.

Dan' B. Long successfully retarded the flowering of a bed of tulips about three weeks by simply placing a layer of cakes of ice on the bed in midwinter, boxing around the sides and covering with sphagnum.

Wm. Belsey has purchased a lot and is building new houses in the 13th ward.

We anticipate a goolly movement convention-ward in August from this vicinity and hope to see all the western men patronize one of the roads that come this way, taking in "Free Niagara" en route. That, with a ride through the valleys of the Empire state and along Hudson river we think is quite an inducement.

Plant trade generally has run well at fair prices. But little if any stocks will be left over.

James Arnott Penman, of New York, paid us a social visit last month.

#### Springfield, Mass.

The Hampden County Hort. society gave a "Rose and Strawberry Show" on June 22 and 23 that was a credit to the society. The roses were very fine, particularly the H. P's. R. H. Smith had the largest collection, forty varieties, some extremely fine, among them Louis Van Houtte, Marie Bauman, Dr. Andry, Mad. Victor Verdier; this collection was awarded first prize. Mr. Smith also took second prize for 12 best distinct blooms and first for best single bloom—Baroness Rothschilds. W. C. Simons' collection was next; his Fisher Holmes, Ulrich Brunner Fils, Pride of Waltham, Victor Verdier and Countess of Oxford were superb. Mr. Simons' 12 took first premium, they were Crown Prince, Gabrille Luizet, Mrs. Harry Turner, Ferdinand de Lesseps, Magna Charta, Mons. Boncenne, Fisher Holmes, Pride of Waltham, Capt. Christy, Marguerite de St. Amand, Charles Le Febvre, Louis Van Houtte. Geo. F. Farmer took third prize for H. P's, and F. C. Boynton was given second for a single bloom of M. P. Wilder.

One of the most interesting tables was a collection of twenty varieties or species of roses representing every part of the world. These were single blooms of many colors and sizes, and were contributed by Jackson Dawson, Arnold Arboretum, Bussey Institute, Boston. W. H. Spooner, of Jamaica Plains, sent fifty varieties for exhibition, many of them very fine.

H. K. Simons, of Greenfield, sent in a beautiful collection of H. P. roses, the



KENNEDYA PROSTRATA MARRYATT (FLOWERS SCARLET.)

were received too late for entry. They were splendid and very much admired. Mr. Simons is connected with a New York insurance company and spends his spare time in his garden among the roses, which he delights to cultivate. His brother, Mr. W. C. Simons, who took the first prize for 12 best blooms is another example of what "improving the time" will do. His city lot is a charming spot where Mr. Simons delights to spend his time when out of his bank, and to invite his friends to see what fine roses can be grown. Other exhibitors were J. E. Taylor, G. F. Farmer, L. D. Robinson, F. E. Boynton and Miss Pierce, all of whom grow roses "just for the fun of it."

The New York Floral Co. exhibited roses and carnations but not for competition. Chas. L. Burr had a fine exhibit of hardy flowers, including Sweet Williams and dianthus in great variety, fox gloves, canterbury bells and irises. Some extra fine pansies were shown by A. Miellez, C. L. Burr, J. E. Taylor, L. W. Goodell and A. B. Howard. So close was the contest that the judges were at their wits end to know who was entitled to the awards. A. Miellez's display of pansy plants in full bloom with adian-

tums and moss to cover the earth was beautiful to say the least.

Among ornamental plants Dexter Snow of Chicopee, displayed some sixty varieties of ferns, some of them quite rare. Years ago Mr. Snow had the best collection of ferns known any where in the state; the best cycas in the room was in J. Wilkinson & Son's collection, a perfect plant in form and well grown. N. J. Herrick and A. Miellez were also exhibitors of palms.

Small collections of other flowers were shown, some very fine fancy petunias, among them the "Mrs. Taylor," which originated with the president of the society some years ago. It is one of the best fringed petunias ever sent out, no florist in this section has ever been able to get stock enough of it yet. A. B. Howard also had several good varieties.

Several made up designs and baskets were shown. The New York Floral Co. was given first for baskets, first for floral designs, a vase made of carnations and roses on a green base. Mrs. W. A. Wilkinson second for basket; J. Wilkinson & Son second for floral designs, a very pretty brokeu column. N. J. Herrick's design was a globe with the scales of

justice suspended above, surmounted with a beautiful white dove, this was given third prize. A beautiful Odd Fellows emblem on a stand composed of hardy garden pinks was made by Geo. F. Farmer, the committee recommended a special award.

As far as the exhibition was concerned it was a success, but on account of the heat, or for lack of interest on the part of the public, the attendance was small. When florists and amateurs spend lots of time in arranging, nothing rewards them better or cheers their heart more than to have a good full house.

#### Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1887.

July 16—Tem. morning 84°, noon 101°, evening 93°. Wind SW. Cleaned and trimmed carpet and foliage beds. Turned potting soil.

17—Tem. 88, 103, 85. SW. to N. Sunday. Hottest day of the season.

18—Tem. 71, 76, 72. N. Planted with celosias three beds from which stocks had been removed. Planted Alternanthera paronychioides major in elevated carpet bed where lobelias had been removed. Cleaned frame yard and continued turning potting soil.

19—Tem. 71, 78, 73. N. Planted pileas and Alternanthera aurea in elevated carpet bed; the first in place of pileas which had been spoiled by heat and fungus, and the second in place of lobelias removed. Planted on south end Mme. Salleroi and Earl Roslin geraniums in place of other plants removed. Continued turning potting soil.

20—Tem. 65, 85, 73. N. to NE. Trimmed and cleaned beds. Turned potting soil. Cut worms and dry weather spoiled lawns west of Stockton drive.

21—Tem. 73, 83, 74. N. to NE. Cleaned and trimmed beds. Turned potting soil. Tried dissolved copperas to kill cut worms in lawn.

22—Tem. 74, 87, 72. NW. to SE. to N. Same as yesterday and repotted and placed in frame a lot of young dracænas, tuberous begonias, etc.

23—Tem. 64, 71, 71. N. to NE. Copperas failed to kill the cut worms in lawn, and commenced gathering them from under the sod. Trimmed foliage bed.

24—Tem. 64, 78, 72. NE. Sunday.

25—Tem. 66, 81, 75. N. Pricked out in pans seedling primulas. Gloxinias now in their beauty.

26—Tem. 73, 83, 81. N. to E. Repotted a variety of plants in frame yard.

27—Tem. 80, 94, 83. S. to W. Trimmed elevated bed. Continued warfare on cut worms in lawn. Till now there has been but little color in Alternanthera aurea.

28—Tem. 71, 76, 72. N. Same as yesterday.

29—Tem. 74, 86, 84. NE. to S. Cleaned and trimmed vases, stands and beds, and continued gathering and destroying cut worms.

30—Tem. 81, 91, 83. WNW. to E. Same as yesterday.

31—Tem. 74, 82, 80. E. to NW. Sunday.

#### Kennedy Prostrata Marryatt.

Like many other fine climbers, Mrs. Marryatt's Kennedy has probably suffered neglect and has been lost to cultivation several times since 1834, and reintroduced from time to time as occasion offered. The wonder is, that it is not a common occupant of every greenhouse



or conservatory where beautiful climbers are desired, as in a temperature suitable for maintaining flowering plants in bloom during winter it flowers almost or quite continuously throughout the year. Where grown under suitable conditions it is still a mass of bloom after having been so all the winter. The flowers are of large size and of an attractive light scarlet, produced four or a stalk in the axils of the leaves; but when growing vigorously, they are much more numerous. The plant is considered a variety of *K. prostrata*, and, certainly, wild specimens show a great range of variation, from the wiry-stemmed and small-leaved forms that trail over the sandy soil to those that approach the vigor of the grand form under notice. The greatest profusion of flowers are produced when the lateral shoots are allowed to hang down loosely. If these should become exhausted, the best plan is to cut them back to the main stems trained under the rafters of the house, when fresh shoots will develop and come into flower again in a comparatively short time. It may be propagated by cuttings, or by seeds which it produces pretty freely. Seedlings flower comparatively early, as in the case of some other species.—*Gardening World*.

#### Hampton Court Gardens.

Some fifteen miles from London on the banks of the Thames is situated one of England's historic palaces viz. Hampton Court. It is well known to all that this was the residence of Cardinal Wolsey during the reign of Henry the VIII. It is now held by the crown and open to the public at all times. The palace itself is a fine type of the architecture of Henry the VIII. time and contains some fine pictures in the state apartments, as well as numerous other articles of national and historic interest.

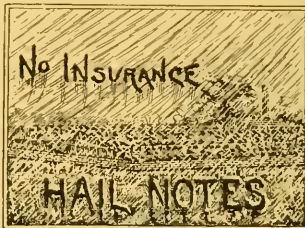
Hampton Court is also celebrated for its fine gardens, splendid park and grand old trees. No where near London can early landscaping be seen to better advantage than at Hampton Court. The palace stands in its own grounds, or palace gardens, but connected with, or adjoining it, is Bushey Park. The palace gardens are on the east and south sides of the palace. Those on the east being laid out with shrubs and trees and containing the well known "Maze." The gardens on the south side or in front of the palace are laid out in ornamental walks and flower beds and the carpet or ribbon garden is here done to perfection. The dark red geranium *Jacobi* is here used with good effect.

Most of the flower beds are of the same shape—about twenty feet long and ten feet wide—but no two are arranged alike. Some will be made to resemble a turkey carpet, while others are laid out in solid masses. The plans of the beds for the present season are not ready, but as soon as they are we will send them to you, as they may be of interest. The long bed close to the palace walls is used for the display of flowering plants and here are shown in the fall of the year choice specimens of asters and chrysanthemums.

Among the features of Hampton Court are the grand old chestnut trees. These were planted under the direction of Cardinal Wolsey and are laid out in avenues running south, east and west from the main entrance of the palace. We have never seen finer trees than these and those in Bushey Park. In the latter they are truly grand. It will give you some idea of the beauty of these trees when I tell you that the main avenue or

drive from the entrance of Bushey Park to Hampton Court Palace is over a mile long and has five rows of trees on each side of it; each of these trees is perfection and a study in itself. At this season the chestnut trees are all in full bloom and they are certainly a sight to see and remember.

London, June 1.



MARLBORO, MASS., JULY 2.—As a result of the severe hail storm of Saturday, the most violent ever known here; piles of ice could be found in shaded places as late as noon today. The damage to crops, windows and greenhouses was almost incalculable. To-day the residents of the place shoveled up the ice, carried it to their houses and used it for refrigerating purposes.—*N. Y. Press*.

We are sorry our Glen Cove friend who was overtaken by a hail storm had not availed himself of the protection afforded by the Florists Hail Association. However, Long Island not being in the "hail belt" he was pardonable for not going in. We hope he will join before he gets hit again.

Come to the convention prepared to insure your glass against hail. The secretary will be on hand to give information. If you don't know him, pick out the jolliest man in the crowd and you won't be far out of the way.

An evening will probably be assigned to the Florists Hail Association. All members are requested to be present to elect a board of directors for the ensuing year.

Don't imagine that the Florists Hail Association makes an assessment every time they have a loss. The association has been in existence thirteen months and there is no immediate prospect of an assessment.

#### The Average Life of a Greenhouse.

According to quality and sort of material used in the construction, a greenhouse will last from five to forty years. Yellow poplar and even some oak will not last over five years, while red cedar free of sap and well seasoned will last forty years and over. But the scarcity of cedar makes it almost impossible to procure it in suitable length, and therefore I consider cypress or yellow pine the next best, the former being far preferable for various reasons. We have sash over forty years old and in constant use and still as sound as when new. Especially for gutter stuff cypress can not be surpassed.

This shows plainly that it pays best to use only first class material in first construction. This applies also to glass. The best quality double thick glass is worth the difference in price in purchasing same as less broken glass will be found in the boxes and hardly any breakage occur in putting the glass on the house; then it will outlast the single thick besides resisting cold and hail more successfully. N.

#### Pansies Again.

With all due respect to the merits of French florists and seed growers I beg to differ with Mr. Zirngiebel, who intimates that all large flowering pansies must be necessarily of French origin, and that the French pansies are the best in existence.

As early as 1855 giant or extra large flowering pansies were grown in Germany in several of the Royal Gardens near Stuttgart, to my personal knowledge and observation. The seed of these pansies came from the Imperial Gardens of St. Petersburg, where as far as I remember they originated some years before under the skillful direction of Dr. Regel, and I have no doubt in the well adapted Russian climate. I would also state that for model shape and richness of colors and designs I have not seen their superior since in any country. For years they were cultivated and known as "Giant Russian Pansies," in the southern part of Germany at least. N.

#### New York Horticultural Society.

The schedule of premiums for November, 1888, is at hand. Liberal cash premiums are offered for chrysanthemums—both plants and cut flowers, orchids, roses, carnations, floral designs, palms and miscellaneous decorative plants. Special prizes of \$25 each are offered by Messrs. T. H. Spaulding, Peter Henderson and John H. Taylor; and of \$10 each by Messrs. W. C. Wilson, Wm. Elliott, Jas. Taplin and John Thorpe. A special prize is also offered by Mrs. Andrew Carnegie for "The best seedling chrysanthemum not shown prior to 1888, of which is to be exhibited not less than one plant and not less than six flowers." Classes are provided for "Florists and dealers," "Amateurs and gentlemen's gardeners" including those who do not grow either plants or flowers for sale, and "Gentlemen's gardeners only," as well as a large number of classes which are open to all. "All plants and cut flowers must be labeled or the premiums will be withheld." Copies of the schedule may be had from John Thorpe, secretary, Pearl River, N. Y.

#### Hydrangeas.

Will some of the readers of the *FLORIST* please to inform me in what respects *Hydrangea Thos. Hogg* differs from *H. Japonica alba*. I procured them as different and distinct varieties, but after cultivating and blooming them I am unable to find a particle of difference between them. CHAS. E. PARNELL, Queens, N. Y.

#### Western Pennsylvania Florists.

If the florists of Western Pennsylvania who propose attending the New York convention will communicate with me at once I will endeavor to secure the lowest railroad rates and will give all information attainable. It is absolutely necessary that each florist acts promptly in order to secure the best results.

New Brighton, Pa. D. R. WOODS,  
Vice Pres. for West Penn.

ROOTING CARNATION CUTTINGS.—I have rooted several cuttings of choice carnations this summer by placing them in a 2-inch pot filled with loam and inverting a 5-inch pot over it, keeping the large pot wet and exposed to the sun. Stoughton, Mass. H. K. S.

## SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant ads. not admitted under this head.

**SITUATION WANTED**—By a first-class rose and S cut flower grower, unmarried. Best of references. Address B. K., care American Florist.

**SITUATION WANTED**—By a practical, thorough florist, 38 years of age. Good references. State salary. Address A. W. KUMMER, Omaha, Neb.

**SITUATION WANTED**—As propagator in commercial business, for rose, carnations, Primula Chinensis, as well as common greenhouse stock. First-class references. German; aged 27. Address A. FAHRENWALD, 100 Parish St., Philadelphia, Pa.

**SITUATION WANTED**—By a middle aged German, S gardener and florist; single; long experience. Best of references. Can come at once if particulars are given in answer. First-class private place preferred. Address FLOREST, care Hesse House, Danville, Ill.

**SITUATION WANTED**—By a thorough plantsman, S florist and propagator, competent in all branches of gardening, either private or commercial. Married. Best of references. Address PLANTSMAN, care A. W. Smith, Boggs Ave., 32 ward, Pittsburg, Pa.

**SITUATION WANTED**—Young man, aged 25, with S a complete knowledge of propagating, growing and forcing of roses, Teas, H. T. and H. P., wishes a permanent position in a commercial place. Only first-class wages accepted, but is willing to bear the responsibility of management. Address ROSKOVICH, Station B, Jersey City, N. J.

**NOTICE**—A reliable florist looking for an opening, with about two thousand dollars, might learn of something by addressing F. care American Florist, Chicago.

**WANTED**—Young man competent to do general greenhouse work. Apply at once. J. P. SULLIVAN, Detroit, Mich.

**WANTED**—Three thousand feet of second-hand 4-inch greenhouse pipe in good condition. Address F. H. MOSES, Bucksport, Me.

**WANTED**—A second-hand greenhouse boiler and 400 feet 4-inch pipe. Address T. T. CHAMBERS, Belfast, N. Y.

**WANTED**—A large second-hand boiler—Hitchings or Allerton preferred. State time in use. Address GULLETT BROS., Lincoln, Ill.

**WANTED**—A sober, industrious florist who understands growing roses and bulbs, to take general charge of greenhouses, in a prominent city in Western N. Y. Ad. K. care Vaughan's Seed Store, Chicago.

**WANTED**—A foreman for the Botanic Garden of Harvard University. Application enclosing copies of testimonials as to training, experience and character may be made by letter only, to Professor Goodale, Cambridge, Mass.

**FOR SALE**—Lot 4-inch pipe; good; used two years. Lot furnace doors and grate bars. Will be sold cheap. JOHN J. CONNELLY, Bryn Mawr, Pa.

**FOR SALE OR RENT**—Four greenhouses in good central location, in a city of 18,000 inhabitants. For terms, address CHAS. A. BUCKMAN, 230 N. State Street, Elgin, Ill.

**FOR SALE**—No. 4 Weathered Hot Water Boiler in use two winters. Is in good condition. Also 4-inch hot water pipe. Address E. J. FADDOCK, Newburgh, Ohio.

**FOR SALE**—A greenhouse—by a mishap the plants were frozen. A first-rate opening for a good, practical florist with a small or large capital. JAS. HUEY, South Bend, Indiana.

**FOR SALE**—Six greenhouses, heated by steam, at Woodbury, N. J., near Philadelphia; frequent trains to city. Will sell entire business, or sell stock and lease houses. Address J. H. L., P. O. box 211, Woodbury, N. J.

**FOR SALE**—The best retail florist's and seedman's business in the west (population 150,000). Reason for selling, with full particulars furnished on application. Address BATA, care American Florist, Chicago.

**FOR SALE**—Three greenhouses (500 ft. dhl. thick glass) heated by hot water, one acre of land, in city of 25,000 inhabitants; three railroads; 12 miles from Philadelphia. Address ROSE HOTUSES, care American Florist, Chicago.

**FOR SALE**—\$7,000 for a good florist business, centrally located, including 4,000 feet of glass and a dveroom house; lots 12x25, 20x50. Property yearly increasing in value. Offered for 30 days. Apply to S. L. BECKETT, 32 & 34 Ontario St., Toronto, Ont.

**FOR SALE**—A greenhouse property in a city of 10,000 inhabitants, natural gas, waterworks, and a good railroad center; 2,000 square feet of glass; Maréchal Niel and Jambouze roses running through all the houses; young orchard; frame house with four rooms; 150 feet front on Main street. For particulars address Box 386 Fern, Ind.

## ROSES FOR SALE.

PERLES, NIPHETOS, COOKS, 2½-in. pots, \$4.25 extra fine, 4-inch pots, 10.00  
SOUVENIR D'UN AMI, large size, 4-in. pots, 10.00  
PAPA GONTIER, large size, 4-in. pots, 15.00  
" " 3-in. pots, 8.00  
Liberal discount on orders of 30 or over. These plants are in fine condition, clean, healthy, and ready for immediate benching.

J. A. COSGROVE, Sparkill, Rockland Co., N. Y.

## THE THREE B. B. B's.

BRIDE, BEAUTY, BENNETT.  
Still rank as the three best roses of recent introduction for forcing. I offer also  
PAPA GONTIER, PURITAN, METEOR.

And all other new and standard varieties of Teas, Hybrid Teas, Hybrid Perpetuals, etc., etc., that are desirable for the trade, in extra fine plants at reasonable prices. I also offer for the first time  
COLUMBIA (NEW 1888).

A bedding rose of very superior merit. For description, prices, etc., write for Trade List to  
JOHN N. MAY, SUMMIT, NEW JERSEY.

Mention American Florist.

## JAMES L. BOYSON,

CAEN, (CALVADOS) FRANCE.

1st Prize for Cut Blooms, Paris, May, 1887.

My CATALOGUE of the NEW

## EUROPEAN ROSES

will be ready January 1, 1888, and will be sent FREE on application.

A large stock of the last two years varieties, as well as all the older kinds for sale.

Send for my complete Catalogue of over 1,200 varieties, with raisers' names and date of sending out

## — ROSES —

E. BENARD,

ORLEANS, FRANCE.

ROSES ON THEIR OWN ROOTS

A SPECIALTY.

NURSERY STOCK OF ALL DESCRIPTIONS

For particulars apply to

E. BENARD, Jr.,

P. O. Box 1400.

San Diego, Cal.

## ROSES

## FOR WINTER FORCING.

We have a fine stock of the following varieties of Roses to offer cheap, well established in 3½-inch pots:

PERLES, MERMETS, LA FRANCE, AM.

BEAUTY, BRIDE, BENNETT, NIPHETOS.

PRICES ON APPLICATION.

We can also supply 500 large strings of Smilax at \$15.00 per 100.

L. L. MAY & CO., St. Paul, Minn.

## THE AMERICAN FLORIST COMPANY'S

## : : DIRECTORY : :

OF

## FLORISTS, NURSEYMEN AND SEEDSMEN

OF THE

UNITED STATES AND CANADA.

1887.

PRICE ONE DOLLAR.

The most complete and accurate list yet published. The key designates the particular branch of the trade each one is engaged in. The street and number of those living in cities will insure the delivery of tons of catalogues which have hitherto remained dead in the office to which they were addressed. At this low price every one in the trade can afford to have a copy for reference. Address

## AMERICAN FLORIST CO.

54 LA SALLE ST., CHICAGO.

## ROSES FOR FORCING.

10,000

PERLES, MERMETS, BRIDES, BON SILENES, SAFRANOS, Strong healthy stock, 4-inch pots, \$10.00 per hundred; \$36.00 per thousand.  
AMERICAN BEAUTY, Fine, 4-inch, \$12.00 per hundred. Several thousand JACOBS, 4-inch, \$10.00 per hundred.

All the above varieties in 2½-inch pots \$5.00 per hundred, \$15.00 per thousand.

C. F. FAIRFIELD, Florist, SPRINGFIELD, MASS.

## New American Roses.

*Freesia Refracta Alba* and *Leichtlinii*.

ROSES SOUVENIR OF WOOTTON and ANNIE COOK, 3-in. pots, 56 per doz., \$35 per 100 4-in. pots, 38

FREESIA REFRACTA ALBA, \$2.00 per hundred; \$15.00 per thousand.

" LEICHTLINII, \$1.50 per hundred; \$12.00 per thousand.

Address JOHN COOK, Florist, BALTIMORE, MD.

## IMPORTER AND GROWER HYBRID PERPETUAL ROSES

WILLIAM H. SPOONER,

Jamaica Plain, Boston, Mass.

## FOR SALE.

250 GREENHOUSE SASH

Suitable for Hotbeds, in good condition, at \$1.00 each, delivered on cars.

A. KRUEGER, MEADVILLE, PA.

## NOVELTIES IN ROSES.

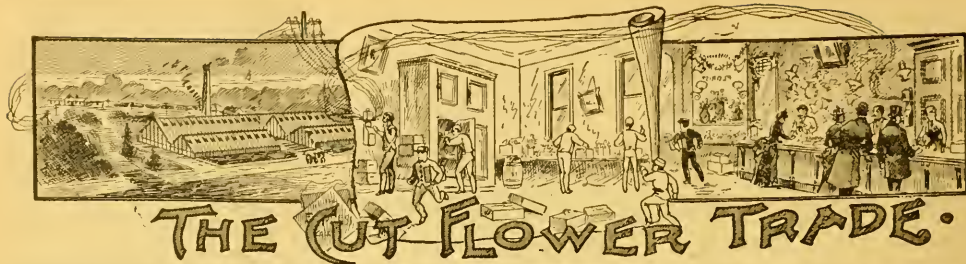
All the latest new varieties; also the leading forcing varieties Teas, Hybrid Teas and Hybrid Perpetuals.

Novelties in Chrysanthemums. Catalogue specialties at lowest rates.

Trade List now ready, mailed on application.

JACOB SCHULZ, LOUISVILLE, KY.





### Midsummer Floral Fashions.

Orchids take the lead in all choice ornamations with flowers. This would not be the case to so great an extent were not the rose supply so very short, and roses so totally demoralized. The hot spell in June and several showers following so injured the varieties depended upon, that there are really no choice roses. Jacqueminots from Newport can be had in limited quantity, but red flowers are out of style, pink, yellow and white being the desirable colors. Moss roses are fair in quality. Ferns are used extensively for dinner arrangements. For the dinner given the Duke and Duchess of Marlborough last week, the center piece was a circle of selected ferns which extended nearly to the covers. The edge included moss rosebuds in its fringing and there was a wide band of open moss roses (pink and blush) above the fringing. In the middle of the piece was a bed of superb cattleyas. Clusters of rosebuds were to be made for ladies' favors, but these could not be obtained.

Lilies of the valley are used in profusion for fashionable Newport dinners. These are arranged in glass and silver dishes. Water lilies floating in glass bowls and shown on plate glass plaques are also in vogue there for center embellishments.

Lily of the valley ordered from Newport is worn by brides. It is applied to the pearl beaded front pieces worn in the skirts of the white Henrietta cloth robes now stylish for these occasions, and a tiara is made of the lilies for the head, which is very elegant and becoming, with the veil thrown back as is now the vogue. Stephanotis is quite as fashionable as lily of the valley, but is only to be obtained from private greenhouses. Bridal bouquets, like all other flower bunches, are made with a fringing center of valley lilies, or oncidiums. Cook roses, with a center of lilies is the favorite bridal cluster. It is finished with adiantums and satin ribbon. Bouquets for other occasions are made of moss roses, pink and blush, with a center of oncidiums which spray wide over the roses. This is the richest style of bouquet ever introduced by our florists, and fills the bill for favorite colors.

Dress bouquets composed entirely of natural blossoms are worn at the wedding places. Lace frames are re-covered daily by the maids, many of whom are becoming skillful in applying flowers to fabrics. Pea blossoms, field daisies, clovers and ferns make lovely little bouquets. Some of them are composed of ivies, geranium leaves and moss buds. Large leghorn suu hats have a cluster of wild blossoms and grasses attached daily. These are much worn at the Moonmoun park races, and are a charming finish to a jaunty costume. Large corsage bunches

to match the flowers of the hat or bonnet are fastened at the belt.

Boutonnières, continue small. A single rose geranium, ivy leaf, or pea blossom is the style. FANNIE A. BENSON.

New York.

### Boston.

The annual Rose and Strawberry Show of the Massachusetts Hort. society took place on June 26 and 27. The display of strawberries was the best seen here for a long time. As to the roses the reverse was true. A sudden spell of hot weather just previous to the exhibition was most unfortunate for the rose growers. The display of orchids was very good for the season. Mr. J. N. May, of Summit, N. J., and Mr. Chas. P. Anderson, of Flushing, L. I., were present as guests of the society.

The regular weekly summer exhibitions commenced on Saturday July 7. There was a fair assortment of delphiniums, fox gloves and Iris Kamperferi besides displays of assorted cut flowers, native and herbaceous.

The annual excursion of the Gardeners' and Florists' Club will take place on July 24. Arrangements have been made for a harbor trip with dinner on board the steamer. A good time is assured.

Mr. P. Welch, of Welch Bros., sailed July 7 for a short vacation on the other side of the Atlantic.

Twenty-six hundred bouquets were presented by the city to the graduates of the public schools. The order for the same was divided up among several of the leading florists. W. J. S.

July 10.

### Chicago.

R. W. Coglan has withdrawn from partnership with Peter Kirscht at Niles Center, Ill. Mr. Kirscht continues the business and Mr. Coglan is now with Kennicott Bros. in the city.

Chas. Reissig is satisfied with the cash returns from his house of orchids. The sales of cut flowers have paid for the plants and he expects to make a good profit another season.

Many inquiries from the west and northwest in regard to the special train from Chicago to New York in August indicate that the plan of traveling together as far as possible meets with favor. While railroad rates have not yet been definitely settled, a rate of one and one third fares for the round trip is assured.

Good roses have been very scarce in this market. In fact first class blooms were not to be had for some time.

Florists in Chicago and vicinity who intend to go to the New York meeting should send their names to this office now, that the number to provide for may be known to the transportation committee.

The Garfield Park Rose Co. will commence the work of building five new rose

houses September 1. They will be 28 x 150 feet each.

Mr. S. W. Burnham, the gentleman who took the photographs from which our series of park views was made, has been appointed to a position of responsibility at the Lick Observatory, Mt. Hammond, near San Jose, Cal. Mr. Burnham has an enviable reputation as an astronomer.

The fancy beds at the various parks now present a very attractive appearance. The immense crowds of visitors which always surround them shows the drift of popular taste. While the parks have many beautiful landscape effects, which are noticed by but a few, the fancy beds never fail to attract the attention of the multitude.

### New York.

Although the Fifth Avenue Theater is advertised on the programme as the place for holding the sessions of the S. A. F. in August, for good reasons the place has been changed to Cooper Union, Neilson Hall, adjoining, will be where the floral exhibition will be made. There is ample room for exhibitors to display all kinds of supplies there.

T. H. Spalding, Esq. and wife sail for Europe on a two month's trip August 14.

Julius Roehrs, Gus Messenger and D. M. Keller are already off for a holiday on the other side of the ocean. Wm. Barr and wife have also sailed.

White forget-me-not is a novelty brought in by a New Jersey grower.

Owney McDonald, one of our popular florists is recovering from a serious illness.

A monster bunch of asparagus raised by Robert Nichols, a market gardener near Philadelphia has been on exhibition in a Courtland street seed store. The bunch is two feet in height, thirty-six inches in circumference and weighs forty pounds, or nearly a pound a spike, all of which is edible. There is some doubt as to its variety, but it is believed to be the new southern sort "Palmetto."

A valuable and choice collection of orchids from Fred Man's establishment was sold at auction the 9th inst.

Wm. J. Brower made a novel design for a steamer gift which was a sea green satin sash, fringed at one end and the waving ravelings laid across the other end. A bunch of Hamburg grapes, surrounded with pink moss buds and Gabrielle Luize roses, lay on the sash. The grapes were finished by ribbon of narrow width which was attached to the stem.

The scarcity of flowers has created a brisk demand for them and made a stir in trade unprecedented at this season.

Hauff Bros. made of lilies and roses a casket cover for the remains of the ex-President of the Arion society which was a rich piece of work.

Siebrecht & Wadley keep an elegant display of orchids in their window continually. F. A. B.

**THE AMERICAN FLORIST**

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 5 Cents a Line, Agate;  
Inch, \$1.40; Column \$1.40.  
Cash with Order.No Special Position Guaranteed.  
Discounts, 3 months, 5 per cent; 6 months, 10 per  
cent; 12 months, 20 per cent.

No reduction made for large space.

The Advertising Department of the AMERICAN  
Florist is for Florists, Seedsmen, and dealers in  
wares pertaining to those lines ONLY. Please to  
remember it.Orders for less than one-half inch space not accepted.  
Advertisements for August 1 issue must  
REACH US by noon, July 25. Address.

THE AMERICAN FLORIST CO., Chicago.

**Catalogues Received.**Michael Rains & Co., Aldgate City,  
London, England, bulbs; Frank W. Foster,  
Boston, Mass., steam and hot water  
heating apparatus.**HOW TO GROW TOMATOES.**—A number  
of articles on this subject have been com-  
bined and published in paper covers with  
above title by the *Horticultural Times*,  
127 Strand, London.THE EIGHTEENTH ANNUAL REPORT OF  
the Entomological Society of Ontario for  
1887 has been published, and received by  
us from the secretary, E. Baynes Reed,  
London, Ont. It contains many valuable  
papers on insects which are injurious  
to vegetation.THE REPORT OF the Fruit Growers'  
Association of Ontario for 1887 is received.  
It contains 177 pages of matter, all of  
value to fruit growers. Experience  
with different varieties in the Canadian  
climate should be of inestimable value  
to Canadian growers. L. Woolverton,  
Grimsby, Ont., is secretary of the  
association.THE CALIFORNIA FLORIST.—The June  
issue, being No. 2 of Vol. I of this publica-  
tion has been received. It is an illus-  
trated monthly published at Santa Bar-  
bara and San Francisco by the Florist  
Publishing Co., and devoted to Pacific  
coast floriculture. It has a lively tone  
and should find a place in the field it  
has selected.**NOTICE**

—OF—

**STOCKHOLDERS' MEETING.**

CHICAGO, ILL., July 10, 1888.

Stockholders of the American Florist Company:

You are hereby notified that the Annual Meeting  
of the Stockholders of the AMERICAN FLORIST  
COMPANY will be held in the ante-room  
of the convention hall in Cooper Union, at the  
intersection of Third and Fourth avenues, and  
Eighth street, New York, N. Y., August 22, 1888,  
at 7 o'clock P. M., for the purpose of electing  
Directors and Officers for the ensuing term, and  
for the transaction of such other business as may  
come before the meeting.J. C. VAUGHAN, Pres.  
G. L. GRANT, Sec'y.**CUT FERN FRONDS.**MIXED, ADIANTUM GRACILLIMUM, A.  
CUNEATUM, A. DECORUM, PTERIS  
CRETICA ALBO-LINEATA, and  
ONYCHUM JAPONICUM,  
at \$1.00 per 100 fronds.

Regular shipping orders solicited by the grower.

GEO. WITTBOLD,  
WRIGHT'S GROVE, CHICAGO.

JOHN CURWEN, Jr.,

GENERAL

GREENHOUSE STOCK AND ROSES.

Villa Nova P. O., Delaware Co., Pa.  
Money Order Office: Bryn Mawr, Pa.**Wholesale Markets.****Cut Flowers.**

BOSTON, July 10.

Roses, Teas	.....	\$1.00
" Fancy	.....	1.00
Carnations	.....	.50 @ .75
Gloxinias	.....	3.00
Lily of the valley	.....	6.00
Stocks	.....	2.00
Asters	.....	2.00
Pink pond lilies	.....	15.00
Salix	.....	10.00
Adiantums	.....	1.50

NEW YORK, July 10.

Roses, Perles, Niphetos, Souvs.	.....	\$2.50
" Mermets, Brides.	.....	3.00 @ 3.50
" La France	.....	3.00 @ 4.00
" Am. Beauty	.....	3.00 @ 4.00
" Bonnets, Jacqs.	.....	3.00
Carnations	.....	1.00
Gloxinias	.....	5.00 @ 8.00
Longiternum lilies	.....	5.00 @ 8.00
Callias	.....	5.00 @ 8.00
Lily of the valley	.....	6.00 @ 8.00
Mignonette	.....	.25 @ 1.00
Pansies	.....	.25 @ .35

CHICAGO, July 12.

Roses, Perles, Niphetos	.....	\$3.00 @ 4.00
" Mermets, Bonnets	.....	4.00 @ 5.00
" Brides	.....	4.00 @ 5.00
" La France	.....	4.00 @ 5.00
" Ross, Safranos	.....	1.50 @ 2.00
" Am. Beauties	.....	8.00 @ 15.00
Carnations, short	.....	.40 @ .75
Carnations, long	.....	.75 @ 1.00
Stocks	.....	1.00 @ 1.50
Callias	.....	15.00
Cacidiuums	.....	3.00 @ 4.00
Tuberose	.....	1.00 @ 1.50
Adiantums	.....	1.00
Gloxinias	.....	15.00
Hollyhocks	.....	1.00 @ 2.00
Sweet Peas	.....	.30

PHILADELPHIA, July 10.

Roses, Perles, Niphetos	.....	\$3.00
" Bonnets, Brides	.....	4.00
" La France	.....	4.00 @ 5.00
" Puritans	.....	5.00
" Jacobs	.....	4.00
Carnations	.....	.75
Bouvardia	.....	.75
Hollyhock	.....	.50
Hollyhocks	.....	1.50
Sweet Peas, bunch	.....	.25
Candy tuft	.....	.15

**WM. J. STEWART,**  
**Cut Flowers & Florists' Supplies****WHOLESALE**

67 BROMFIELD ST., BOSTON, MASS.

CHOICE GLOXINIA BLOOMS . . . \$ 4.00 per 100  
PINK POND LILIES . . . . . 10.00 "**CUT FLOWERS AT WHOLESALE**  
**N. F. MCCARTHY & CO.****WHOLESALE FLORISTS,**

63 Bromfield St., under Hort. Hall, Boston, Mass.

We have made large contracts with the best Rose  
growers about Boston to handle their entire stock  
this season. Our stock will consist of Pinks, Goster,  
Bennett, Pierre Guillott, American Beauty, Mer-  
met, La France, Malmalson, Cook, Bride, Niphetos,  
Perle, Niel, Anna Webb and others. We shall have  
long stems of our flowers in variety. We shall have  
a particularly large lot of Mermets and Perles, so  
that in sending to us when you fail to get them else-  
where you will feel reasonably sure of getting them.  
Unknown parties must give satisfactory reference  
or let us send C. O. D. Write for information.

Mention American Florist.

**CUT ROSES**  
**AT WHOLESALE.**The only establishment in the West growing Roses  
exclusively. 20,000 square feet of glass devoted to  
the growth of the Rose. We cut, pack and ship the  
same day; thus enabling the consumers to get fresh  
Roses without being handled the second time.  
Ship Cut Roses all over the country, with perfect  
safety.Also all the leading varieties of young Rose plants  
for sale.GARFIELD PARK ROSE CO.,  
1688 West Madison Street,  
Corner St. Louis Avenue, CHICAGO.**W. F. SHERIDAN,**  
**Wholesale & Commission Dealer**

—IN—

**CUT FLOWERS.**  
721 Sixth Avenue, NEW YORK.

Thos. Young, Jr., &amp; Co.,

**Wholesale Florists,**

INCORPORATED 1885,

20 W. 24th St., NEW YORK.

**W. S. ALLEN,****WHOLESALE DEALER IN CUT FLOWERS,**

36 EAST 23rd STREET, NEW YORK.

ESTABLISHED 1877.

Price List sent upon application.

**LaRoche & Stahl,**  
**Florists & Commission Merchants**

—OF—

**CUT FLOWERS,**1237 Chestnut Street, - - PHILADELPHIA.  
Consignments Solicited. Special attention paid to  
shipping. Mention AMERICAN FLORIST.**C. STRAUSS & Co.,**

TELEPHONE 97. WASHINGTON, D. C.

**WHOLESALE ROSE GROWERS**

AND DEALERS.

**LARGE STOCK OF ALL THE NEW ROSES.**

Orders booked for young stock at special rates.

**HAMMOND & HUNTER,**

Wholesale dealers in

**Cut Flowers and Florists' Supplies**

61 West 30th Street, NEW YORK.

**WELCH BROS.,****WHOLESALE FLORISTS,**

165 Tremont Street BOSTON MASS.

We make a specialty of shipping choice Roses and  
other Flowers, carefully packed, to all points in  
Western and Middle States.  
Return Telegram is sent immediately when it  
is impossible to fill your order.**KENNICOTT BROS.,****WHOLESALE FLORISTS.**

ALL CUT FLOWERS IN SEASON.

Write for price list. Consignments solicited.

27 Washington Street, CHICAGO.

**CUT FLOWERS**The choicest Cut Flowers at lowest market rates  
shipped C. O. D. Telephone connection. Use A. F.  
code when ordering by telegraph. For prices, etc.,  
Address,

J. L. DILLON, BLOOMSBURG, PA.

**N. STUDER,**

Anacostia P. O., Washington, D. C.

WHOLESALE

**Plant and Cut Flower Grower**

— ALL CUT FLOWERS IN SEASON. —

Write for price list.

10,000 Coleus, Yellow Alternantheras and Achyras  
thru from 2-inch pots, \$2.00 per 100.  
5,000 Geraniums in good variety, from 4-inch pots  
\$5.00 per 100. Larger lots, special prices.



## The Seed Trade.

## London Notes.

Mr. C. P. Braslan, (of Northrup, Braslan & Co.) Minneapolis, was here last week at the Charing Cross Hotel, and after visiting the various seed houses is now in Paris.

C. L. Allen, of the A. B. Cleveland Co., was also here last week and devoted some time to the wholesale seed trade. Mr. Allen is now in Paris.

Mr. J. C. Vaughan arrived on the German Liner Saale on June 28 and is now at the Covent Garden hotel. Mr. Vaughan expects to leave for Paris next week.

Messrs. Cooper, Taber & Co., limited, notified their friends that on June 1 they had purchased the wholesale seed business of Messrs. Waite, Nash & Co. and Henry Clarke & Sons, and would carry on the same under their own name. The capital of this company is £50,000.

The travelers of the various London seed houses are now preparing for their annual trip and these "Ambassadors of Commerce" (in American parlance, Drummers) may be expected shortly.

Mr. W. Atlee Burpee is now in Germany (with his sister and mother), but will be in London on his way home about August 15.

Mrs. Harris, whose husband (the most efficient office man in the American seed trade) is with Thorburn & Co., is spending the summer in England.

A very interesting law case covering seed warranty has just been decided here. Particulars later.

T.

MESSRS. SUTTON AND SONS.—We understand that Messrs. Martin Hope Sutton and Alfred Sutton, who have been members of the firm for more than fifty years, have retired by the effluxion of time. The firm of Sutton & Sons will be continued in future under the same style and title by the sole proprietors, Messrs. Martin John Sutton, Herbert Sutton, Arthur Warwick Sutton and Leonard Goodhart Sutton, who have for several years past been the acting partners.—*London Garden.*

ROCHESTER, N. Y., July 10.—Hiram Sibley, the head of the well known seed house, suffered a stroke of apoplexy yesterday afternoon and is at the point of death. Mr. Sibley is 81 years of age.

## A Daily Paper Which Knows Something About Gardens.

One bogus gardener has met with his deserts. Caught selling onion seed for hyacinth bulbs, he has been charged with assuming the name of a prominent florist and held to answer for his misdeeds. Now if the tree butchers who, on pretence of trimming, saw off healthy boughs and otherwise mutilate the natural, graceful growth of city trees, could only be sent to keep this fellow company—but it is some months too late for that. Better knowledge on the part of the owners of gardens and trees would soon send these fellows out of business. One trouble is that the people who employ them usually do not know what should be done or left undone. As to distinguishing one lot of bulbs from another, except by odor, it would take an expert to do that. So the only protection against such trickery as was tried by this pretended bulb seller is to remember that reputable florists have no occasion to send round "drumming" for custom,

and that, if you wish to aid a gardener out of employment, he might be referred easily for a rapid examination to some florist that you know. It is only umbrellas, tin pans and scissors that are sent to the back gate to be repaired, and there is no more reason for trusting the garden furniture to a stranger than there would be for calling such a one in to repair a mantel clock or broken chair.—*Philadelphia Ledger.*

## News Notes.

CHARLESTON, S. C.—This city will have a chrysanthemum show next November.

ALBANY, N. Y.—Henry Gloeckner, aged 83 years, the florist at the Albany Rural cemetery, died July 5.

BLOOMINGTON, ILL.—Sidney Tuttle & Co. are building a new propagating house 20 x 100 with slate benches.

NEW YORK.—Beatty & Co., the lithographers, are succeeded by Beatty & Votteler at 193 and 194 West street.

DETROIT, MICH.—L. A. Wiltse has opened a floral store at 304 Woodward Ave.—the stand lately occupied by P. Bush & Son.

ERIE, PA.—Henry A. Niemeyer has purchased twenty acres of land for gardening purposes, and on which he will build nine large greenhouses.

GUELPH, ONT.—The winter and spring term in the Ontario Agricultural College closed June 29 with the usual ceremony. There were twenty-seven graduates.

RIPON, WIS.—The annual summer meeting of the Wisconsin State Hort. society opened in this city July 2. A considerable amount is offered in premiums.

PITTSBURG.—Chas. S. Crall, of Monongahela City, Fred Burki and wife, of Allegheny, and Miss M. Paegem, of Penn avenue, recently returned from a trip to Chicago.

PROVIDENCE, R. I.—The June exhibition of the R. I. Hort. society was much inferior to those of former years, both in quality and especially in quantity, much to the regret of those interested.

SUMNER, W. T.—L. N. Hudson, a well known florist here, was accidentally shot and killed while on a prospecting tour with a party of friends in the neighborhood of the Longmire hot spring, June 11.

BALTIMORE.—The conservatory at Druid Hill park is now rapidly approaching completion. The building is of iron and glass on a granite foundation, the proportions being pleasing and artistic.

OMAHA, NEB.—The trade this year for commencing has been almost double that of previous years, most call being for baskets, although a good many preferred cut roses and bouquets. Cut flower trade all spring has been very brisk.

ST. CATHERINES, ONT.—Thos. Holder has been laid up with brain fever since March 1. His condition is precarious. Jas. Dunlop is interested now in a house—65x18—of mushroom which are worth about 40 cents a dozen in Ontario and \$1 a dozen in New York.

ALLENTOWN, PA.—Business was extraordinarily good in this locality this spring. I think it fortunate for a florist to be large in stature, to overcome the difficulties arising in the business. For

instance, if Mr. Scallen had been of my size, he would only had to have looked at Mr. Edgerly to change his manner.

HUNTSVILLE, ALA.—The Alabama State Hort. society will hold a meeting in this city the second week in August. The society was organized last February with the Hon. D. C. Dunklin president, and Mr. Caffee of Lowndes county, secretary and treasurer.

SPRINGFIELD, O.—McGregor Bros. now have 40,000 feet of glass. Good & Reese are making room for five new houses—two 64 x 10 and three 64 x 12. Jas. Maxwell, of Murphy & Maxwell, sailed from New York on the Arizona for Scotland. He will return in September.

NEW BEDFORD, MASS.—The Gardeners' and Florists' club gave its first annual rose show June 27. A fine exhibition was made, though it was not confined entirely to roses; gloriovias, ferns, hydrangeas and other tropical and blooming plants being well represented.

HARTFORD, CONN.—At the second June exhibition of the Hartford County Hort. society, the features were roses and strawberries. The officers of the society say that notwithstanding the backward season the display of roses was never before equalled in this city.

SALT LAKE CITY, UTAH.—Spring plant trade fully double that of last year, but prices were generally lower. Pansies met with best demand. Geraniums and fuchsias in 4-inch pots retailed at from \$1.50 to \$2.50 a dozen; heliotropes, tea roses and begonias \$3 a dozen; verbenas 50 to 75 cents; coleus \$1; pansies 25 to 75 cents a dozen.

DULUTH, MINN.—Spring plant trade was one-half larger than last year. An increased demand for roses and bedding stuff was noticed. Geraniums in 4-inch pots retailed at \$2 to \$2.50 a dozen; fuchsias and tea roses \$2 to \$3; heliotropes \$2; begonias \$3; verbenas and coleus in 2½-inch pots \$1 a dozen; pansies 50 cents to \$1 a dozen.

ELMIRA, N. Y.—Plant trade about the same as last year. Grove P. Rawson has just completed seven additional forcing houses, each 100 feet long. Four for roses, one for carnations, one for violets and one for ferns. Heated by steam throughout, glass 12 x 18 double thick French. At this date roses, carnations and violets are looking superb.

KANSAS CITY.—The Missouri Valley Hort. society held its regular picnic meeting June 16, at Rosedale, Kan. The question of market facilities in this city was discussed and resolutions were adopted asking the city council to provide a proper market. The resolutions, which are lengthy will be presented to the council and published in the city papers.

INDIANAPOLIS, IND.—Spring plant trade about equal to last season. Season very short and weather cold. Prices somewhat higher for good stock. Geraniums in 4-inch pots retailed at \$1.50 to \$2 a dozen; fuchsias \$2 to \$3; heliotropes \$1.20; tea roses \$3; begonias \$2; verbenas and coleus in 2-inch pots 50 cents; pansies 50 cents. There was an increased demand for moon flowers and clematises.

LITTLE ROCK, ARK.—Spring plant trade was about the same as last year in general stock, but larger in roses, geraniums, verbenas and pansies owing to the low prices at which they were sold.

Owing to a foolish cutting of rates among the florists prices ruled about one-third less than usual. Geraniums in 4-inch pots retailed at 75 cents a dozen; fuchsias heliotropes and begonias \$1 a dozen; tea roses 10 to 20 cents each, \$1 a dozen; verbenas 25 to 50 cents a dozen; coleus 50 to 75 cents, pansies 25 to 50 cents.

MINNEAPOLIS, MINN.—Spring plant trade one-fourth larger. Prices about the same as last season. Geraniums, heliotropes and begonias, in 4-inch pots retailed at \$2.50 a dozen; fuchsias \$2.50 to \$3; tea roses \$3; verbenas and coleus in 2½-inch pots \$1 a dozen; pansies 75 cents. Most florists have completely sold out. The season was short; it commenced late and bedding had to be done in a very short time. Roses have been exceptionally good this spring. The rose takes the lead as a cut flower here.

MINNEAPOLIS, MINN.—Articles of incorporation of the Southern Minnesota Horticultural Society have been filed with the Secretary of State. The object as set forth in the articles of incorporation is to collect and disseminate correct information and to stimulate a deeper interest in all horticultural matters among the people of Southern Minnesota. The capital stock is to be \$10,000. The annual strawberry festival of the State Hort. society was held at the experiment station June 28. The attendance was large and the gathering very enthusiastic. Prof. Cleveland the landscape gardener, who has done much to beautify the parks, made a brief talk, in which he urged the horticulturists of Minnesota to use more effort in developing the natural beauties of the state.

SPRINGFIELD, MASS.—The Hampden County Hort. society held its rose and strawberry show June 22. Prizes for H. P. roses were awarded to R. H. Smith, W. C. Simons, Geo. F. Farmer, Wm. H. Spooner, E. C. Boynton; for tea roses to J. E. Taylor, Adolph Miellez; for June roses to Geo. F. Farmer, R. H. Smith; for pansies to A. B. Howard, L. W. Goodell, Chas. L. Burr, Adolph Miellez, J. E. Taylor; for petunias to A. B. Howard, J. E. Taylor; for cut flowers to Chas. L. Burr, L. W. Goodell, C. L. Simons; for bouquets to C. L. Burr, Mrs. L. D. Robinson, C. L. Simons; for basket to New York Floral Co., Mrs. W. A. Wilkinson; for floral designs to New York Floral Co., J. Wilkinson & Son, N. J. Herrick, L. D. Robinson, Geo. F. Farmer; for collection of ornamental plants first to Adolph Miellez.

DENNISON, TEXAS.—The meeting of the State Hort. society opened June 28, with a very large attendance. Among the papers read were "The General Texas Forestry Problem," B. E. Fernow, Chief of the Forestry Division of the Department of Agriculture, Washington, D. C.; "Evergreens Successful in North Texas," Dr. W. W. Shell, Paris, Tex.; "Evergreens Successful in South Texas," Capt. H. M. Stringfellow, Hitchcock, Tex.; "Ornamental Shade Trees in Texas," Robert Drum, Fort Worth, Tex.; "Landscape Gardening in North Texas," J. S. Kerr, Sherman, Tex.; "Landscape Gardening in South Texas," Wm. Watson, Sherman, Tex. The exhibition was very fine. The premiums for vegetables were remarkably large, ranging from \$50 to \$100 each, with a sweepstakes of \$500, which was awarded to the one who received the most premiums in the regular classes.

#### Your Fall Trade List.

Print your FALL TRADE LIST in the AMERICAN FLORIST. It will cost you less money and do you more good than to print and mail your list yourself. We will print and mail your list, in the columns of this paper, to 5,000 buyers for much less than the postage alone would cost you. A full page in the FLORIST costs only \$12 for one insertion. It would cost you twice that sum to get up a list of your own and mail it to 5,000 addresses. Think it over! We can save you money and secure you better results at the same time, for the FLORIST is preserved while your trade list otherwise mailed would rarely be kept on file. We will print extra copies for you—from the type after being set—at a nominal rate if you wish extra ones to mail in response to requests. If half a page is large enough it will cost you but \$21 for the service.

NURSERYMEN.—With our August 1 issue we shall begin the publication of a Supplement for nurserymen which will be devoted entirely to the interests of the nursery trade and will be mailed with each issue during the months of August, September, October, January, February and March. This Supplement appearing twice each month during the buying and selling season will be unsurpassed as a trade advertising medium. Ads. of surplus nursery stock and nurserymen's tools and supplies are solicited, also news notes of interest to the nursery trade.

WESTERN FLORISTS.—The Chicago Florists' Club is arranging for a special train from Chicago to New York next month. The Pennsylvania R. R. has offered one of their superb vestibuled trains to be run on limited time and with an observation car while going over the Allegheny mountains. This route is undoubtedly the best from Chicago to New York, and as the rate of fare will be the same over all roads why not join the Chicago Club at their city and journey thence to New York together? If you wish to go on the special train write to G. L. Grant, Sec'y., 54 La Salle street, Chicago.

#### The Newest Floral Extravagance.

The latest craze amongst those who are blessed with an abundance of gold is a floral room, the walls covered with moss and constellated with pendulous orchids, the ceiling of lattice-work, on which pots of antheris are placed with the flowers downward, thus producing a carpet of foliage and flowers as charming as it is unexpected and anastrophic.—*London World.*

#### The Boiler Question.

Hobbs.—Yes sir! My boiler consumes less fuel than any one on the market. It can be proved. Look at these testimonials!

Johnson.—Quantity of coal? Why sir, none consume less than mine. Hobbs' boiler? Well, that isn't a bad boiler, but it eats up coal terribly. Mine doesn't use up half the quantity of fuel to give the same amount of heat.

Jenkins.—Go and ask Mr. R. E. Turnflue about my boiler. He had one of mine and one of Johnson's side by side last winter and says that mine consumed but half the coal with the same quantity of boiler attached.

Bolts.—Use steam by all means. It's every way better and cheaper than any hot water apparatus. Use less fuel than

Jenkins' boiler? Well, not more than one half as much if properly handled. A water boiler don't stand any earthly show against our automatic, self-feeding, self-regulating steam heater. Mr. I. N. Jector has tried both and says ours uses only a quarter of the fuel consumed by his old Jenkins hot water boilers.

Buyer.—Well! If I can only keep this up I may run across a boiler that will produce fuel instead of consuming it.

A HEAVY FALL OF SNOW in the middle of June was a novelty experienced in Cornwall, Great Britain, last month.

CUT WORMS.—Will some one tell of a remedy for "cut worms." They are very destructive to my pinks and violets, and my compost heap is full of them.

Stoughton, Mass. H. K. S.

DR. M. T. MASTERS, editor of the *Loudon Gardeners' Chronicle*, has been elected corresponding member of the Institute of France to fill the vacancy caused by the death of Dr. Asa Gray.

THE ROYAL BOTANIC SOCIETY of London, held an evening fete on July 4, at which prizes were awarded for "Floral decorations arranged for a dinner table 10 by 5 feet." The prizes were awarded for general effect, without reference to the value of the plants and flowers used.

QUINCE CULTURE.—An illustrated handbook for the propagation and cultivation of the quince, with descriptions of its varieties, insect enemies, diseases and their remedies, by W. W. Meech, A. M., is published by Orange Judd & Co., New York, and A. C. McClurg & Co., Chicago. The author is well known to fruit growers through the introduction of the quince known to the nursery trade as Meech's Prolific.

#### What is a Plumbagger?

One of my lady customers on seeing a dark crimson geranium with white eye exclaimed: "Oh how pretty. It looks like a plumbagger." Can any one tell us what a "plumbagger" is? We have had orders for "high geraniums" (hydrangeas), codys (coleus), and prussias (fuchsias), but we still grope in the dark as to the identity of the "plumbagger." R. W. H.

#### The Names of Roses.

##### DRAMATIS PERSONÆ.

Marion—An American young lady.  
Ethel—An English ditto.  
Ethel's big brother.

SCENE—Florist's store in American city.

ETHEL.—Catherine Mermet roses for me.

MARION.—Bride roses for me, please.

ETHEL'S BIG BROTHER.—This, I dare say, is as pretty as any. I must have one. What do you call it?

MARION.—Oh, that is an American Beauty.

ETHEL'S BIG BROTHER.—Ah, yes, to be sure. That is the sort I fancy, you know, even if they are thickly set with thorns.

[It is whispered that Marion will be a transplanted rose before another Easter.]

#### There is Still Hope.

SHE [smelling of the bunch of hybrid roses he had sent her]—"The florist tells me that plants have almost as many diseases as the human race."

HE [absently]—"The prices seem to remain healthy and vigorous, though."



Fink & Co., Mexico.

Although I read your article in June 1 number I can not help cautioning your readers in regard to Fink & Co., Mexico, whose advertisement I still notice in the FLORIST. On April 14 last they sent me a bill for a very large lot of plants which they said they had shipped on that day. They drew on me for the amount (several hundred dollars) which I paid. They made at the same time an offer of another lot of plants which I accepted by telegraph. Since then I have never heard from them in answer to several telegrams and letters, and none of the goods have ever been shipped. You can well imagine in what a fix their failure to forward the plants paid for has put me, as I had already sold them in lots to a dozen different dealers. A. BLANC.

Philadelphia, June 5, 1888.

[We received the above letter June 7, and the same day wrote to Messrs. Fink & Co. giving an outline of Mr. Blanc's letter and requesting an explanation by return mail, adding that unless the explanation was a satisfactory one we should be under the necessity of publishing the facts. No reply having been received up to time of going to press for the July 1 issue we dropped out their advertisement but gave them two weeks further grace for fear of doing an honest firm injury through error. Over a month has now elapsed, however, without a reply and we feel that we can not in justice to our readers further delay. We advise all to send no money to Fink & Co., Mexico, until their actions shall have been satisfactorily explained—if such an explanation is within the limits of possibility, which we doubt after the futile efforts we have made to secure one.]

## BULB LIST

OF

H. H. BERGER & CO.,

315 & 317 Washington St., SAN FRANCISCO, CAL.

	Per Bulb	Per 100
<i>Lilium Auratum</i> , medium, 2 1/2 in. diam.	\$4.00	\$35.00
" large	2 3/4	5.00 50.00
" extra	3	5.00 40.00
<i>Speciosum Album</i> , 2 1/2 in.	5.00	40.00
" 2 3/4	10.00	90.00
" Roburm, large bulbs	5.00	50.00
<i>Longiflorum Eximium</i> , 1 1/2 in. diam.	4.00	35.00
" 1 3/4	5.00	45.00
" Kraueri, strong bulbs	5.00	40.00
<i>Tigridium Splendens</i>	2.00	45.00
" <i>Flore Pleno</i>	2.00	65.00
" Batemannii	5.00	40.00
" <i>Corollon and Concolor</i>	4.00	30.00
" Elegans, best seed	1.00	35.00
<i>Chinese Narcissus</i> , very large bulbs	3.00	70.00
	Per 100	Per 100
<i>Lilium Auratum</i> <i>Rubrum Vitatum</i>	\$5.00	\$75.00
" <i>Pictum</i>	5.00	40.00
" <i>Virginie</i> <i>Album</i>	9.00	75.00
" <i>White</i> , each 1 1/2 in.	12.00	120.00
" <i>Brown</i> (or <i>Coleaster</i> )	1.00	65.00
" <i>Hansonii</i>	7.00	65.00
" <i>Leichlinii</i>	4.00	35.00
" <i>Elegans</i> <i>Alice Wilson</i>	7.00	65.00
" <i>Flore Semi Pleno</i>	4.00	30.00
" <i>Flore Pleno</i>	5.00	40.00
" <i>Incomparable</i> (very choice)	9.00	85.00
" <i>Tigridium</i> <i>Corridolum</i>	1.00	9.00
" <i>Sarrum</i> <i>Knausht</i> <i>Kense</i>	2.00	25.00
<i>Iris Kempteri</i> (best new sorts)	2.00	15.00
<i>Iris Japonica</i> (Guernsey Lily)	75	6.00
<i>Hemerocallis</i> <i>Dimorpha</i> (pure citron yellow)	2.00	20.00
<i>Crimm Asiaticum</i> , pure white spire Lily	3.50	25.00

### CALIFORNIA LILY BULBS.

	Per doz	Per 100
<i>Lilium Bloomerianum</i>	\$1.25	\$8.00
" <i>Columbianum</i>	1.25	8.00
" <i>Pardalium</i> (uncommon Lily)	75	6.00
" <i>Perryi</i> (one of the choicest)	2.50	18.00
" <i>Washingtonianum</i>	1.25	8.00
" <i>Rubescens</i>	1.25	8.00
<i>Calla Lilies</i> , in three sizes, \$1.50 and \$6 per 100.		
Our bulbs are all sound, select, true to name. Above prices are for A. B. C. bulbs in San Francisco packed safely.		
Freight on bulbs to New York is \$4 a 100 lbs.; over 2,000 lbs. only \$2.25 a 100 lbs.		
100 Auratum bulbs, boxed, average 40 to 50 lbs.		
Send in orders early for Fall delivery.		
Bulbs ready 1st of September to 1st of October.		
Send us your orders, and we will give you lowest estimate.		
Colored plates on hand of 33 varieties of Japanese Lilies.		

## WE ARE NOW BOOKING ORDERS FOR HYACINTHS, TULIPS, Single and Double NARCISSUS, Etc. SEEDSMEN AND FLORISTS

Importing direct should write us for prices. Special rates to large buyers. Largest stock of

*Hyacinths, Tulips, Polyanthus, Single and Double Narcissus, Narcissus Bicolor  
Horsfieldi, Poets Ornatus, Trumpet Major, Double Von Sion.*



R. VAN DER SCHOOT & SON.

Bulb Growers,

HILLEGOM, near Haarlem, HOLLAND.



TRADE MARK.

POLMAN MOOY,

HAARLEM,

HOLLAND.

WHOLESALE GROWERS OF

DUTCH BULBS.

SEE OUR GENERAL LIST FOR NOVELTIES AND SPECIALTIES.

HEADQUARTERS FOR FORCING BULBS.

ESTABLISHED IN 1810.

PRICES LOW.

DUTCH BULBS, ROMAN HYACINTHS,

*Lilium Candidum and Harrisii, Freesias, Paper White Narcissus, etc.*

From the BOSKOOP HOLLAND NURSERY ASSOCIATION, HARDY LOW BUDDED DWARF

ROSES, TREE ROSES, RHODODENDRONS, Azaleas, Lilacs, Hydrangeas;

EXTRA STRONG CLEMATIS, ETC., ETC.

Catalogues for Fall Importation now ready.

ADDRESS:

C. H. JOOSTEN, Importer,

3 Coenties Slip, NEW YORK.

**BULBS** WE ARE LARGE IMPORTERS OF FORCING BULBS.  
SEND YOUR LIST FOR PRICES.  
**CURRIE BROS.,** SEEDSMEN AND FLORISTS.  
MILWAUKEE, WIS.

E. H. KRELAGE & SON,

The King's Nurserymen and Seedsmen,  
HAARLEM, HOLLAND.

**DUTCH BULBS.** Newest Wholesale Trade List (No. 401a) now ready. Sent the trade prepaid on application.

PRICES MUCH REDUCED, AND VERY CHEAP. Enormous stock of first quality and complete collections of Bulbs of every description. NO AGENTS. Please address direct. This catalogue contains two first offers of UNRIVALED COLLECTIONS of fine late Tulips for amateurs, and late ONE COLORED BREEDERS, never before offered, as well as of STRAWBERRIES. Shortly issued: A new edition of the catalogue of COLORED PLATES of Plants, Flowers, Fruits, etc. (No. 395), containing more than 1200 names and prices of plates of all sorts, principally of Bulbous and Tuberous-Rooted Plants. This Catalogue too will be supplied free on application.

**DUTCH BULBS!**

G. V. VAN ZANTEN & CO.,

WHOLESALE BULB GROWERS,

Hillegom, Haarlem, Holland.

ESTABLISHED 1862.

Our stocks are selected with the greatest care for the American trade.

Price list free on application—before ordering write for one.

**HULSEBOSCH BROS.,**

*Dutch Bulb and Plant Growers,*

OVERVEEN, in HAARLEM, HOLLAND,  
SUPPLY THE TRADE.

Address for the United States, P. O. Box 3118 New York City. Wholesale Catalogue on application.

**HIGLEY'S TRADE LIST OF  
SEEDS, PLANTS, BULBS**

AND FLORISTS' REQUISITES

Now out. If you do not receive one, send for it. Address

HENRY G. HIGLEY,  
CEDAR RAPIDS, IA.

**AUGUST RÖLKER & SONS,**  
44 Dey St., NEW YORK,  
Supply the Trade with

**SEEDS, BULBS,**

And all kinds of

**FLORISTS' SUPPLIES.**

Revised Price List mailed on application.

**Bulbs, Immortelles, Etc.**

SPECIAL PRICES ON LARGE QUANTITIES.

**J. A. DE VEER,**

(Formerly of DeVeer & Boomkamp.)

183 Water St., New York.

SOLE AGENT FOR

THE GENERAL BULB CO., Vogelenzang, (Holland.)

LS. BREMOND FILS, Ollioules, (France.)

Full Catalogues now ready. Free to applicants in the trade.

**FORCING BULBS.**

ROMANS AND DUTCH HYACINTHS,  
NARCISSUS, LILIU HARRISII  
AND CANDIDUM, TULIPS,  
FREESIAS, ETC.

Send for prices by the 100 or 1000. Special list will be ready in August.

A. GIDDINGS, DANVILLE ILL.

**C. H. ALLEN,**

(Successor to C. L. ALLEN & CO.)

**BULB GROWER**

TO THE TRADE ONLY,

JAMESPORT, N. Y.

Catalogues ready in August.

Office during Convention, 36 E. 23rd st., N. Y.

**SMILAX.**

Fine strong plants for immediate planting. 3-inch pots, \$3.00 per hundred.

**FREESIAS.**

Strong Blooming Bulbs from seed of own growing, several new strains, \$2.50 per hundred.

F. A. BALLER, BLOOMINGTON, ILL.

**HIGH GRADE PANSIES**  
A SPECIALTY.

After a thorough trial of the most noted strains of Pansies in cultivation, we confidently recommend the following to the trade as a long way ahead of all others, for size or colors:

Our Improved Giant Trimardeau as the best for market. Package of 100 seeds, \$1.00.

And New French Fancies as Extra. Package of 400 seeds, \$1.00.

**DENYS ZIRNGIEBEL,**

Needham, Mass.

(NEW CROP SEED AFTER JULY 1st.)



KILLS

INSECTS

FISH KILL-  
ON.  
HUDSON, N.Y.

# BERMUDA EASTER LILY

(L. HARRISII.)

WE HAVE A VERY FINE LOT OF THE ABOVE LILY.

5 to 7 inches in Circumference @ \$6.50 per 100, \$60.00 per 1000.

7 to 9 inches in Circumference @ \$10.00 per 100, \$95.00 per 1000.

Free on board cars in New York.

—ORDER EARLY.—

**V. H. HALLOCK & SON,**

QUEENS, NEW YORK.

**F. E. McALLISTER,**

—WHOLESALE DEALER IN—

Seeds For the Florist Market, Gardener and Farmer. Requisites Such as Baskets, Immortelles, Grasses, Mosses, Bouquet Papers, Pampas, etc. Bulbs For the Greenhouse or Garden.

22 Dey Street, - - - NEW YORK.

**SEGERS BROTHERS,**

GROWERS OF

**HOLLAND BULBS.**

OUR SPECIALTIES ARE:

Holland Hyacinths and Tulips, in any quantity; also Crocuses, Narcissus, Daffodils, Liliums, Lily of the Valley, Gladiolus The Bride, Anemones, Ranunculus, Spiræa Japonica, etc.

References as to quality of our Bulbs, etc., to several United States Florists and Seedsmen.

Our Wholesale Catalogue is now Published.

PLEASE DO NOT DELAY TO SEND YOUR ORDER.

**LISSE. NEAR HAARLEM, HOLLAND.**

WHOLESALE ONLY.

NO AGENTS.



**BASKETS, BOUQUET PAPERS.**

Send for special list for School Commencements.

**FALL BULBS.**

ORDERS TAKEN NOW FOR ROMAN HYACINTHS, LILY CANDIDUM, LILY HARRISII, AND ALL FORCING BULBS.

ALSO FOR THE FULL LINE OF DUTCH BULBS.

**JAMES KING,**

170 Lake St. CHICAGO.

**DUTCH HYACINTHS.**

Our Wholesale Catalogue for the coming season of

**DUTCH HYACINTHS, TULIPS, NARCISSUS,**  
AND ALL OTHER BULBS AND BULBOUS ROOTS

is now ready. Don't forget to forward a postal card if you want one, as there is a great reduction in prices of

Hyacinths, Narcissus, Gladiolus, and other worth-growing Bulbs and Roots.

**SEGERS & CO.,**

BULB GROWERS,

**LISSE, near HAARLEM, (Holland.)**



## A Decidedly Floral Wedding.

A Louisville daily paper relates that a teacher in one of the city schools recently instructed her pupils to write a "composition" on the marriage of Mr. Dandy Lion and Miss Mary Gold. One of the little girls realized that she had a pretty tough job on hand, and told her parents about it, remarking that her teacher had a disagreeable way of selecting subjects that nobody could write about with any kind of success. It seemed to the family at first thought that it would indeed be difficult to elaborate a merely imaginary event, but the possibilities were discussed and suggestions were made, after which the pupil sat down and produced the following:

LION—GOLD.

The marriage of Mr. Dandy Lion and Miss Mary Gold took place at the residence of the bride's father, Mr. Big Sunflower, in Honeysuckle bower, last evening. The ceremony was performed by Rev. Mr. Holly Hock, assisted by Rev. Mr. Hyacinth. The bride was dressed in beautiful gold silk, with brown and orange trimmings, and her maids, Misses Rose Verbena, Lily Geranium, Pansy Blossom and Passion Clematis, in beautiful costumes, appropriate alike to their names and the occasion. Mr. Lion was attended by his young friends, Johnny Jump-up, Jack-in-the-Pulpit and Pete Tunia, whose Poppy played the Wedding March on the peony. After the marriage and congratulations, a reception was given the bridal party at the residence of Mr. Coxcomb, a distant relative of the groom, after which the happy couple left on the Daisy railroad for the land of orange blossoms, where they will visit Mr. and Mrs. Rhoda Dendron. On their return they will take up their residence on Magnolia avenue.

## 500 SMILAX.

Nice. From 2½-inch pots.

R. E. SHUPHELT, Florist,  
CHATHAM, COL. CO., N. Y.

## FREESIAS—GUERNSEY—FREESIAS

ONE OF THE OLDEST STOCKS IN EUROPE.

No *Freeesia* Surpass *Our*.

Buyers should avoid being supplied from stocks recently received from the Cape. To Florists there are a sure loss.

Our Bulbs start growth all together, and these, with size is the sure test of quality in Freesia.

CHAS. SMITH & SON,  
NURSERYMEN,  
GUERNSEY, ENGLAND.

## WE HAVE

## FINE PLANTS OF THE FOLLOWING

ROSES—	Per 100	Per 1000
Sufragno, Mermel, White Bon Silene,		
Bride, La Pucelle, Queen of the Borders,		
Madre, Alice, Bernini, and fifty other		
good varieties of Teas, Polyanthas,		
Bourbons, etc.	4.00	\$30.00
Geraniums, in 20 good varieties.	2.50	
Geraniums, De Viray, line plants.	2.00	
Alternanthera, 3 var.	2.00	18.00
Coleus in variety	2.00	18.00
Periwinkles	2.00	
Gouardia Lelandia	5.00	
Honeysuckles, Halliana and Aurea		
Retenclata	2.00	
Recheveria secunda glabra	3.00	
Begonia tuberculata and Semp. Gliz. Rosa	7.00	
Passiflora, Constance Elliott, Fordill		
Smithii, Trifasciata	3.00	

\* List mailed on application.

Address **GEO. THOMPSON & SONS,**  
LOUISVILLE, KY.  
Mention American Florist.

## ROEMER'S SUPERB PRIZE PANSIES.

THE Finest Strain of Pansies in the World. *Introducer and Grower of all the leading Novelties.*

Catalogue free on application.

FRED. ROEMER, SEED GROWER.  
QUEDLINBURG, GERMANY.

THE BEST AND CHEAPEST  
DOUBLE PETUNIA SEED

(P. hybrida grandiflora fl. pl.)

In the market. For sale to the trade by the grower.

G. A. McTAVISH,  
NORTH SAANICH, B. C., CANADA.  
Mention American Florist.

## LAING'S BEGONIAS.

AWARDED FOUR GOLD MEDALS.



**JOHN LAING & SONS**  
 cordially invite all Americans and Colonial friends visiting London during the summer months to come and see their grand collection of single and double

## BEGONIAS

Which for quality and quantity are unsurpassed by any other collection. Our beds and houses during the summer and autumn will be a sight never to be forgotten.

DO NOT FAIL TO SEE THIS GRAND FLORAL DISPLAY

Best route to reach our Nurseries is from Charing Cross, Cannon Street, or London Bridge (30 minutes' ride) to Calford Bridge Station, thence a walk of 5 minutes. DESCRIPTIVE CATALOGUES POST FREE.

## JOHN LAING &amp; SONS,

Seed, Plant and Bulb Merchants,  
FOREST HILL, LONDON, ENGLAND.

Registered Telegraphic Address—Caladium, London.  
Mention American Florist.

## PELARGONIUMS.

GEO. TAYLOR. The best and most profitable for early market, starts blooming in ordinary cool greenhouse by middle of March; deep pink and very showy. Strong bushy plants, 3 to 3½-inch pots, 80.00 per 100; 4 to 4½-inch pots, 80.00 per 100.

ANDREW MEYER, 3218 S. Jefferson St., St. Louis, Mo.

## NATAL, SOUTH AFRICA.

## BULBS, TUBERS, ROOTS.

A Wholesale Catalogue of select Native Plants cultivated by the undersigned is now ready, and will be forwarded free on application. Orders booked for spring delivery.

K. W. ADLAM, Maritzburg, Natal.

THE ILLUSTRATED  
Dictionary of Gardening

A Practical and Scientific Encyclopædia  
of Horticulture for Gardeners  
and Florists.

## EDITED BY GEO. NICHOLSON,

of the Royal Botanic Gardens, Kew, England.

A most valuable work of reference for florists and all interested in horticulture.

PRICE, for the set of seven handsomely bound volumes, \$21.00.

## JAMES A. PENMAN,

12 Dey Street, NEW YORK.

Sole Agent for the United States and Canada.

Orders may also be addressed to the

AMERICAN FLORIST CO.,

54 La Salle Street, CHICAGO.

## FORCING BULBS

FOR

Fall Delivery.

## NARCISSUS

AND OTHER

## FORCING BULBS

For Fall Delivery

All Good Flowering Bulbs.

OF NARCISSUS I SHALL HAVE ABOUT  
TWO MILLIONS READY FOR  
FALL DELIVERY.

Narcissus Albicans, the best of the single white trumpets.  
Narcissus Bicolor Empress, the queen of the bicolor daffodils, enormous flowers.  
Narcissus Bicolor Grandis, similar in color to Horsfield, but having larger flowers and blooming later.  
Narcissus Bicolor Horsfield, one of the largest and best for cutting.  
Narcissus Bulbocodium, the Hoop Petticoat daffodil; very fine, strong bulbs.  
Narcissus Bulbocodium Citrus, like the yellow Hoop Petticoat, but with pale sulphur-yellow flowers.  
Narcissus Golden Spur, very large deep yellow flowers and early blooming; one of the best.  
Narcissus Henry Irving, one of the best deep golden yellow trumpets.  
Narcissus Incomparabilis Cynosure, a beautiful single Incomparabilis for cutting, yellow cup, divisions creamy white.  
Narcissus Incomparabilis Stella, large single white variety, very early, fine for cutting.  
Narcissus Major, true, one of the best forcing sorts, large yellow trumpet, similar to maximum.  
Narcissus Nobilis, a first-class variety for florists, free and early.  
Narcissus Obvallaris, the true Tenley daffodil, one of the best varieties, forcing deep rich yellow flowers of great substance.  
Narcissus Odorus Campanelle, the well-known Campanelle jonquil, very strong bulbs.  
Narcissus Orange Phoenix, large double white flowers with orange center, good for cutting.  
Narcissus Pallidus Præcox, the earliest of all; forces very freely; single sulphur-colored trumpets.  
Narcissus Poeticus Ornatus, the early white poet's Narcissus, the best of the Poeticus section for forcing and for cutting.  
Narcissus Poeticus Plenus, the double white Narcissus.  
Narcissus Princeps, one of the best forcing sorts; soft pale yellow trumpets.  
Narcissus Rugilobus, true, large yellow trumpet, very free and very early.  
Narcissus Scoticus, the Scotch Garland daffodil, a beautiful variety both for borders and for forcing.  
Narcissus Von Sion, true, the double deep yellow daffodil.  
And many other first-class sorts. List of varieties and price I should be happy to furnish on application.  
Anemone Fulgens, true, fine strong English grown tubers.  
Chionodoxa Lucilia, true, beautiful blue flowers in early spring.  
Freesia Refracta Alba, one of the best modern plants for forcing, pure white, sweetly scented flowers.

I shall be happy to post prices of any of the above upon application.

THOS. S. WARE,

HALE FARM NURSERIES,

Tottenham, London, England.

# SURPLUS STOCK.

## 25,000 MUSA ENSETE,

The Great Abyssinian Banana, Best Decorative Plant for the Lawn.

## 100,000 ROSES

PERLES, NIPHETOS, BRIDES, CATHERINE MERMET, PURITANS, LA FRANCE, Mad. CUSIN, Etc.

## HARDY PLANTS OF ALL VARIETIES.

Prices extremely low can be had on application.

**B. A. ELLIOTT CO.,**

**PITTSBURG, PA.**

### FALL CATALOGUES WELL PRINTED.

AND any other Catalogues you want, any time. No better work anywhere—not much as good. We print with good type and presses; plenty of live cuts, and use BRAINS trained to work accurately for Nurserymen, Florists and Seedsmen—this last item is sometimes scarce, to judge by many catalogues! Write for samples and prices. Not only Catalogues—Trade Lists, Circulars, Stationery, etc.; anything but seed-bags, litho. colored plates and printed wooden labels. Write freely, but specifically.

J. HORACE MCFARLAND, Harrisburg, Pa.

### SPECIAL OFFER. CELERY PLANTS.

#### SELECT STOCK.

GOLDEN HEART, per 1000.....\$1.50 CRAWFORD'S HALF DWARF, per 1000, \$1.50  
PERFECTION HEARTWELL, per 1000, 1.50 Ready through July and August.

Our system of light packing, of stocky, well-grown plants, ventilated so as not to heat, ensures their safe arrival in best condition for setting without loss.

HARMAN & SON, South Bend, Ind.

### ROSES.

We have several thousand extra fine plants grown in 4-inch pots from two-eyed cuttings at the following low prices: Per 100  
PERLES and NIPHETOS.....\$12.00  
MERMETS and LA FRANCE.....12.00  
BON SILENE and SAFRANO.....10.00

J. L. DILLON, Bloomsburg, Pa.

### POT GROWN STRAWBERRIES

Now is the time to plant to secure a good crop next season. Our plants are in the finest condition. Catalogue containing full directions mailed free.  
Ellwanger & Barry, ROCHESTER, N. Y.

### THE SYRACUSE NURSERIES,

OLD AND RELIABLE.

Are still offering the most complete assortment of young, smooth, thrifty Stock in America. BUDDED APPLES, STANDARD PEARS, DWARF PEARS (High and Low Headed) PLUMS, CHERRIES, PEACHES, QUINCES, RUSSIAN APRICOTS, GOOSE-BERRIES, CURRANTS, and a full line of

Ornamental Trees, Shrubs, Etc. Also Extra Sized Standard Pears of the Finest Quality.

Special Inducements to Buyers in large quantities. Trade List out August 1st.

SMITHS, POWELL & LAMB, Syracuse, N. Y.

# THE AMERICAN FLORIST

— WILL PUBLISH A —

## CONVENTION SUPPLEMENT

To be mailed with the issue immediately preceding the meeting. It will contain a MAP of a section of New York City, showing the location of the Convention and Exhibition Halls, Hotels at which special rates have been secured, Railroad Depots, etc. Also the programme of the meeting, in addition to many other notes of interest to those attending the convention.

Space will also be allotted to cards of those who are exhibiting at the meeting and wish to call SPECIAL ATTENTION to their exhibits, for which purpose the SUPPLEMENT will afford UNEQUALLED FACILITIES, as it will be in the hands of each Delegate BEFORE the meeting and in connection with other reference matter of value at the time.

Rates for advertisements in the SUPPLEMENT will be the same as in the body of the paper. Send in your orders early, being careful to state that the advertisement is for the SUPPLEMENT. Address

**AMERICAN FLORIST CO.**

54 La Salle Street, CHICAGO.



Per 100  
Smilax, fine plants,.....\$ 8.00  
Asparagus 4-onalms..... 5.00  
Pelargonium Fred Dornier,  
3-in. pots \$10.00, 4-in. pots 15.00  
Calla, 4-tropicals, 2 1/2 & 3-in. 5.00  
" " 4-inch..... 12.50  
" " nana, 2 1/2-in. 1.00  
" " " 3-inch 4.00  
Hydrangea Thos. Hook &  
Horreus, 2 1/2-inch..... 6.00  
Hydrangea Thos. Hook &  
Horreus, 4-inch..... 10.00  
Gardenia Radicans, 3-in..... 6.00  
" Florida 2 1/2-in..... 6.00  
Echeveria Secunda Glauca  
3-in..... 4.00  
Oleanders, white, 2 to 3 ft. 15.00  
Perennial Phlox, good assortment, 4-inch pots..... 10.00  
Roses, Bon Silene & Mermet, 4-in. pots, strong..... 12.00

MICHEL PLANT AND SEED CO.,  
718 Olive St., ST. LOUIS, MO.

### 5,000 SMILAX.

Strong, healthy plants in 3-in. pots,

\$4.00 per 100, \$35.00 per 1000.

BRENNEMAN & PETTERSON,

Harrisburg, Pa.

### WESTERN FLORISTS

I OFFER NOW

### SMILAX

Per 100  
Nice, thrifty plants.....Only \$2.50  
Geraniums, Asa Gray, 4-in. in bud and bloom...\$ 8.00  
" " " 3-in. " " " 3.50  
" " Gen. Grant, 3-in. " " " 3.50  
Hibiscus, 2-inch, 5 var..... 5.00

Address N. S. GRIFFITH,

JACKSON CO. INDEPENDENCE, MO.

(Independence is well located for shipping, being 8 miles east of Kansas City.)

× × × × × × × × × ×

### SMILAX.

WANTED—YOUR TRADE.

Fine young plants ready now, from No. 3 rose pots.

ORDERS BOOKED for Delivery either in July, August or September.

Send for low prices and shipping particulars. Can send by fast freight or express.

### PANSIES.

Will have a fine assortment for planting frames in the fall or forcing. Send for particulars.

ALBERT M. HERR,

Lock Box 338.

LANCASTER, PA.



## The American Florist.

This semi-monthly publication is an actual necessity to every florist. We sincerely pity any grower who has seen and thinks he don't need it, and venture to remark that bright green moss can surely be obtained in his vicinity without the use of a magnifying glass. If this should meet the eye of a florist who has not seen the lively paper alluded to, we advise him to send to us for a sample copy before he gets ten minutes older; and if he is wise enough to send along a dollar, we will have the **FLORIST** and the *International Horticultural Advertiser* both mailed to him for one year, with the proviso that if he don't get the dollar's worth in the papers in less than three months, we will cheerfully send him back the money.

The *International Horticultural Advertiser* is not a competitor of THE AMERICAN FLORIST, but a co-laborer; and if in time we can make our paper as essential to its constituency as is the **FLORIST**, we will be about satisfied.—*International Hort. Advertiser*.

[As a rule we do not believe in filling space with the recommendations of others, knowing that if the paper can not speak for itself the say-so of others will fall flat, but the above is so hearty and original that we make room for it. The *International Horticultural Advertiser* is now published by J. Horace McFarland, Harrisburg, Pa., and shows a remarkable improvement under his management.—Ed. A. F.]

## A National Flower.

I am interested in the suggestion as to our national flower. It seems to me that something more ought to be taken into consideration than one's individual preference for a particular flower. It ought to be one native to our soil and of the widest possible range of habitat. Since Oscar Wilde has removed the reproach of coarseness from the sunflower by making it the symbol of aestheticism, it seems to me that it best fulfills the requirements of a national emblem. Let us hear other nominations and have a vote on it.

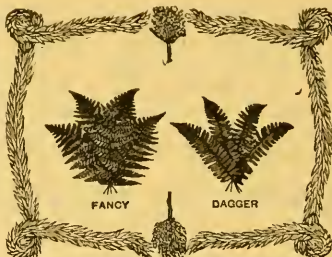
Geneva, Ill. T. H. EDDOWES.

THE NATIONAL FLOWER.—On page 502 of June 15 issue, it was said that the nomination of the trailing arbutus was a poor one, and the objector nominated the pansy for the position. The last nomination I consider still worse. To be sure it is common, but it is not a native wild flower which I think our national flower should be. I nominate our native blue violet. Its hue is that of one of our national colors, is popular and grows wild all over the country. G. B. L.

SEASONED LUMBER.—In building do not forget that thoroughly seasoned lumber is the best and cheapest in the end. Have all your material well seasoned and give it a good priming before exposed to the weather an hour. Painting unseasoned or damp lumber is in fact an injury to it as the moisture is thereby retained and rot hastened. A greenhouse which costs \$700 and lasts twelve years is considerable cheaper than one which costs \$500 and lasts but six years. Don't you think so?

**WILL SELL CHEAP.**  
About 50 Strong MARSHAL NET ROSES,  
3 feet high, in 8-inch pots. Prices given on application.

GEO. CLASSMANN,  
Sing Sing, N. Y.



Mention American Florist.

## ED. JANSEN,

Importer & Manufacturer

— or —

**NOVELTIES IN BASKETS.**

124 W. 19th Street,

bet. 6th & 7th Aves.

NEW YORK.

## M. M. BAYERSDORFER &amp; CO.

56 N. 4th St., Philadelphia, Pa.,

Manufacturers and Importers of

**BASKETS \* AND \* FLORISTS' \* SUPPLIES.**

A large variety of Baskets for  
**COMMENCEMENTS.**

## CABBAGE PLANTS.

**EARLY WINNINGSTADT,  
FOTTLER'S BRUNSWICK,  
AND FLAT DUTCH.**

Fine plants, securely packed for shipment. 1,000  
\$1.50; 10,000 \$12.00; 25,000 \$25.00.

J. L. DILLON. Bloomsburg, Pa.

## ADVERTISE IN

— OUR —

**CONVENTION SUPPLEMENT.**

TRY DREER'S  
GARDEN SEEDS

Plants, Bulbs, and  
Requisites. They are the  
best at the lowest prices.  
TRADE LIST issued  
quarterly mailed free.

HENRY A. DREER,  
Philadelphia

## APPLE GERANIUM SEED.

Per 100 40c; per 1000 \$3.00; per 10,000 \$25.00.

Orders filled while stock lasts. First come, first served. Address

BROTHERS' INDUSTRIAL GARDENS,  
MOBILE, ALA.

## CUT SMILAX TO THE TRADE.

FINE LOT.

ALSO QUITE A LOT OF FRESIA BULBS.  
Would like to sell in one lot low. Will make dealer  
make proposition. Cash.

C. THOMPSON ADAMS, West Medway, Mass.

Delegates to the next  
convention will travel  
via the



TO AND FROM  
Louisville, Indianapolis, Cincinnati, and the winter resorts of Florida and the South. For full information address  
E. O. McCormick, Gen. Passenger Ag't, Chicago.

## CUT FERNS.

## NEW CROP 1888.

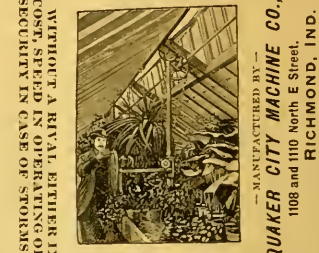
NOW READY. Used for Bouquet Work, filling Flower Baskets, Decorating Altars, &c., &c., and are preferred by many to smilax.

\$1.50 per thousand Ferns.

BOUQUET GREEN. \$2.00 per bbl. (30 lbs.) or \$6.00 per 100 lbs. Season commences Oct. 1st for holiday trade.

SPHAGNUM MOSS—Long clean fibre, dry or green, \$1.00 per bbl. or six bbls. for \$5.00. Sample or trial sacks containing 3 bushels of Moss, dry, very light, designed for express shipments, \$1.00 per sack.

L. B. BRAGUE, Hinsdale, Mass.

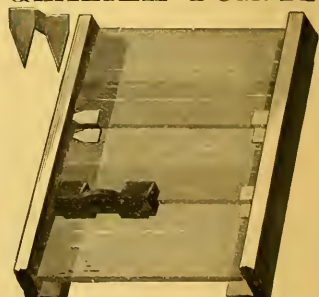
THE EVANS CHALLENGE  
VENTILATING APPARATUS.

WHEN WRITING FOR ESTIMATES, PLEASE GIVE  
FOLLOWING DIMENSIONS:

- 1st. Give the number of sashes to be lifted.
- 2nd. Give the length and depth of sashes, (depth is down the roof.)
- 3rd. Give the length of house.
- 4th. Give the height from the ground to the comb of roof.
- 5th. Give the thickness and width of rafters or sash bar.

H. W. EAMES & CO.'S  
PATENT TWIN

## GLAZIER POINTS



## A USEFUL INVENTION

The twin point at the upper left hand corner of cut represents the full size of points, while the tool that is used for pushing the points into the window frame is shown on the cut.

No more leaky Skylights! No more slipping and breaking of Glass in Greenhouses or Farmers' Sash.

These points the manufacturers claim are far superior to the old mode of setting glass, as they will hold each pane in place, thus not allowing the glass to slip, causing binding and consequent cracking. Each box contains 300 rights and 300 lefts. The manufacturers also make a tool for driving the points. These points are the cheapest and best, and most durable in the market; as testified to by many florists in every state in the union. Sold by almost all prominent seedsmen in the country. If you don't find them at your supply stores, send direct to the manufacturer as we have made arrangements with the Adams Express Co. for low rate of express charges to promote traffic, so you need not fear charges will be too high. A Liberal Discount to the Trade.

Price 35 cents a box. Tools 15 cents each. Address all orders and communications to the manufacturers.

H. W. EAMES & CO.,  
Milford, Mass.

Preserve this advertisement for future reference and send for samples before you do your building and repairs.

**A. BLANC,**  
ENGRAVER FOR FLORISTS,  
PHILADELPHIA.



Catalogue of electros of plants, flowers, designs, etc., with '7 and '8 supplements, 35 cts., with 1898-99, 50 cents, which deduct from first order. Electro of this Cut, \$1.50.

## SMILAX.

FINE YOUNG PLANTS NOW READY.

Address

**HENRY PALMER,**

Langhorne Nurseries. LANGHORNE, Bucks Co., PA.  
Mention American Florist.

## SMILAX FOR EASTER

IN QUANTITY FOR THE TRADE.  
**STORM KING FUCHSIA**—Well rooted Cuttings, \$3.00 per 100, as good as pot plants.  
**FUCHSIA PHENOMINAL**—\$6.00 per 100, or will exchange for *Chrysanthemums* and *Geraniums* of some varieties, and *tbl. Abut. Thompson*.

**F. E. FASSETT & BRO.,**  
Ashtabula, O.

Mention American Florist.

## ORCHIDS

Cheap as Good Roses.

Send 8 two cent stamps for Catalogue and Plate.

**BRACKENRIDGE & CO.,** GOWANSTOWN, Md.

## ORCHIDS.

Best and Largest Stock in New England to Cut.

**CAPE COD PINK POND LILIES,**  
AND ALL COLORS.

Send for List.

**BENJ. GREY,** Malden, Mass.

## Ferns, Palms, Orchids

**FERNS FOR FLORISTS' PURPOSES,**  
BY THE HUNDRED OR THOUSAND,  
**GEO. WITTBOLD,**  
Cor. School and Halsted Sts.,  
LAKE VIEW, CHICAGO.

## OUR NEW TRADE DIRECTORY

Contains over

**6,000 Names of (Live)**

Florists, nurserymen and seedsmen, in the United States and Canada.

**PRICE ONLY ONE DOLLAR.**

AMERICAN FLORIST CO., Chicago.

**F. A. RIECHERS & SOHNE A. G.,** Florists,  
HAMBURG, GERMANY.

Largest stock of *Azalea Indica*, *Camellias*, *Lilacs* of the valley for the wholesale trade. Price list on application.

## PALMS, ORCHIDS and DECORATIVE PLANTS.

Immense Stock, at Low Prices to the Trade.

**Siebrecht & Wadley,**

ROSE HILL NURSERIES, New Rochelle N. Y.

409 FIFTH AVENUE, NEW YORK.

## TEA-SCENTED AND OTHER ROSES,

30,000 IN POTS.

**Clematis, 50,000 in pots,**

Grand plants, fit for shipment at any time.

## 200,000 Dwarf Roses for Fall Delivery.

Our collection is unequalled, and the plants promise to be exceptionally fine.

20 ACRES FRUIT TREES. 10 ACRES RHODODENDRONS.

Descriptive and Priced Lists mailed on application.

**JOHN CRANSTON & CO.,**

KINGS ACRE NURSERIES,

ESTABLISHED 1785.

HEREFORD, ENGLAND.

## ADVERTISE IN OUR CONVENTION SUPPLEMENT.

### ORCHIDS! ORCHIDS!

Many additions of Choice New varieties this season.

Send for New Catalogue.

**WM. MATHEWS,**  
UTICA, N. Y.

FOR SALE. FALL DELIVERY.

50,000

### AZALEA INDICA and CAMELLIAS.

For Catalogues, address

**C. H. JOOSTEN,**

Importer of Bulbs and Plants.

3 Counties Slip, NEW YORK.

## SMILAX.

Fine plants from 2-inch pots, \$3.00 per hundred.

## ROSES.

From 3 and 4-inch pots, \$7.50 and \$10.00 per hundred, in the following var., La France, Mad. Cusin, Mad. Watteville, C. Mermet, Bon Silene, M. Robert, Com. de Frignese, The Bride and Nipotes.

**THEO. BOCK,**

Cor. 10th and Heaton Sts., HAMILTON, OHIO.

## CELERY PLANTS.

WHITE PLUME, PERFECTION HEART-WELL, NEW ROSE, GOLDEN

HEART, GOLDEN DWARF.

\$2.00 per thousand, in any desired quantity.

SEASON BEGINS JUNE 1 AND EXTENDS TO JULY 30.

**JOSEPH DUNKLEY,** Celery Grower,  
KALAMAZOO, MICH.

## SURPLUS TO EXCHANGE

For H. P. and Tea Roses, 2½-in. pots.

4,000 Finest Named Ranunculi; 2,000 *Eutalias*, var. and zeb.; 500 *Am. Sariensis*; 500 *L. Candidum*; 20,000 *A. Adamas*; 400 *Cooperia Drummondii*; 100 *iris Suislaw*; 100 *Hemerocallis Ray*; 100 *Arundo donax* var.; 400,000 Sets *Ex. Pearl Tuberosa*, both extra large and medium. Address at once with offers.

**MRS. J. S. R. THOMSON,** Spartanburg, S. C.

Mention American Florist.

## FOR FLORISTS.

Colons, 20 varieties.....	Per 100
<i>Geraniums</i> , 4-inch pots, in bid.....	4.00
" " 3-inch pots.....	10.00
Roses, 4-inch pots, fine.....	4.00
" " 2-inch pots.....	12.00
<i>Achyranthes</i> , 2-inch pots, 6 varieties.....	5.00
<i>Chrysanthemums</i> , 2-inch pots, 10 var.....	4.00
<i>Verbenas</i> , 2-inch pots, 12 var.....	5.00
<i>Lobelias</i> , 2-inch pots.....	3.00
Golden Feverfew, 2-inch pots.....	4.00
Violets, <i>Maria Louise</i> , 2-inch pots.....	4.00
Carations, 3-inch pots, 8 var., strong.....	4.00
Single <i>Petunias</i> , 2½-inch pots, good var.....	4.00
<i>Recheverlas</i> in boxes.....	5.00
<i>Heliotropes</i> , 2-inch pots, 8 var.....	4.00
Miniature, 4-inch pots, in bloom.....	10.00

The above stock in fine, healthy condition, and can be used for immediate sales. Any number of plants may be taken at above quotations, providing you take nothing less than one dozen.

**GEO. W. MILLER,**

WRIGHT'S GROVE, CHICAGO.

Mention American Florist

## ROSES.

Our Roses are in perfectly healthy condition.....	Per 100
<i>Mermet</i> , Bon Silene, (from 4-inch pots.....	3.00
S. d. in Am. Cook, " 3-inch pots.....	5.00
Safrano, and Adam, " 2½-in. pots.....	8.00
Bride, 2½-inch, 80 Br. 3-inch, 50.00; 4-inch.....	12.00
Comtesse de Frignese, 3-in. 38.00; 4-inch.....	10.00
Papa Gontier, 2½-inch pots.....	8.00

*Smilax*, strong plants from 2½-in. pots, \$3.00 Per 100  
*Chrysanthemums*, best forcing vars., 4.00 30.00  
Cabbage, best winter sorts, strong plants, 1.50

**CELERY** (strong transplanted plants in all leading varieties, \$4.00 per 1000.)

**I. C. WOOD & BRO.,** Fishkill, N. Y.

## PRIMULA OBCONICA

IN QUANTITY.

FINE, HEALTHY PLANTS.

**PETER FISHER,**

Montvale, Mass.

Mention American Florist.

Every Florist! Every Nurseryman! Every Seedman!

SHOULD HAVE OUR

## \* DIRECTORY \*

Address AMERICAN FLORIST CO., 54 La Salle St., CHICAGO.



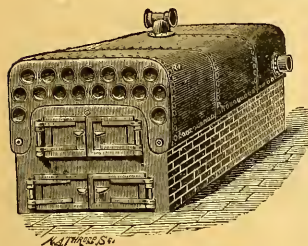


ESTABLISHED 1854.

**Devine's Boiler Works**

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers.



Capacity from 350 to 10,000 feet of four-inch pipe. Send for New List.

**PETER DEVINE,**  
387 S. CANAL ST.,  
CHICAGO.

**Ives' Putty Machine.**

Patented Jan. 8, 1887.

The best device ever invented for laying putty. With this you can make old leaky sash perfectly tight without removing the glass. It will do the work of five men in bedding glass.

Sent by Express on receipt of price, \$3.00.

**J. H. IVES, DANBURY, CONN.****HALES' MOLE TRAP**

For destroying ground moles in lawns, parks, gardens and cemeteries. The only PERFECT mole trap in existence. Guaranteed to catch moles where all other traps fail. Sold by seedsmen, Agricultural Implement and Hardware dealers, or sent by express on receipt of \$2.00 by **H. W. HALES, RIDGEWOOD, N. J.**

**Conservatories**

GREENHOUSES, ETC.

Erected in any part of the U. S. or Canada Glazed on the

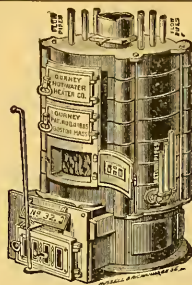
Helliwell Pat. Imperishable System  
OR WITH PUTTY.

For further testimonials, illustrated catalogue or estimates address

**JOSEPHUS PLENTY.**  
HORTICULTURAL AND SKYLIGHT WORKS.

Offices, 144 Pearl Street, NEW YORK.

NOT RED BASH.  
VENTILATORS.  
WRITE FOR PRICES.  
CASH IN FULL SIZE  
PINE or CYPRESS.  
WE CARRY A FULL STOCK  
OF 12, 14 and 16 foot lengths.  
JOHN L. DIEZ & CO.,  
530 N. Halsted Street,  
CHICAGO.



SECTION.

**GURNEY HOT-WATER HEATER**

FOR WARMING  
RESIDENCES, OFFICES, PUBLIC  
BUILDINGS, CONSERVATORIES, ETC.,

HOT-WATER CIRCULATION.  
Have you investigated the Gurney system of heating by Hot Water? If not, it will pay you to do so. Send for our Illustrated Descriptive Catalogue, free to all.

MANUFACTURED BY  
**GURNEY HOT WATER HEATER CO.**

OFFICE AND SHOWROOM:

237 Franklin Street, BOSTON, MASS.

SELLING AGENCIES—M. H. JOHNSON, 140 Centre St. N. Y.; RICE & WHITACRE MFG. CO., 42 & 44 W. Monroe St. Chicago, Ill.; T. R. CHASE, 31 Edmund Place, Detroit, Mich.; WILLIAM GARDNER & Co., Portland, Oregon; J. L. FRISVOLD, 525 Fifth St., Covington, Ky.; VALK & MURDOCH, Charleston, S. C.

IT PAYS TO DO WORK EARLY.



ESTABLISHED 1853.

— THE —

**O. K. STEAM GENERATOR**

Is especially adapted to warming

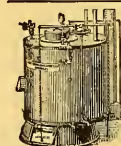
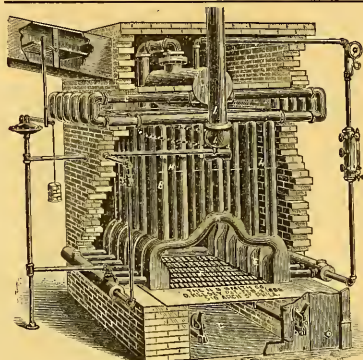
GREENHOUSES, GRAPERIES  
AND CONSERVATORIES.

Special features insure

Economy, Simplicity, Durability,  
BURNS SOFT COAL OR WOOD,  
Giving best results with least labor and fuel.  
SEND FOR DESCRIPTION.

**THE H. B. SMITH CO.,**

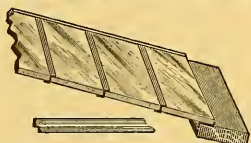
510 Arch Street, PHILADELPHIA, PA.  
Mention American Florist.

**Reduce your Coal Bills**THE **FURMAN STEAM HEATER**

ESPECIALLY ADAPTED FOR WARMING GREENHOUSES.

Gives a most uniform heat night and day. Can be run with less attention, and a SAVING of fully 20 to 25 Per Cent. in Fuel over any other method. Burns HARD or SOFT COAL. Endorsed by leading florists. Send for full Illustrated Catalogue, Address **HEREDEEN MANUFACTURING CO., GENEVA, N. Y.**

IMPROVED GLAZING.

**J. M. Gasser's Patent Zinc Joints,**

For putting glass without laps; makes it air and water tight; saves fuel and glass. No breakage from frost. Also the best improved fuel oil Burners for steam boilers. Send for sample and price list.

**J. M. GASSER,**  
101 Euclid Avenue, CLEVELAND, O.

**SASH BARS**

VENTILATORS, RIDGES, GUTTERING  
AND LUMBER.

NO WIDE-AWAKE FLORIST need be told  
it will pay him to use Sash Bars, etc. made from

CLEAR CYPRESS.

Bars all Shapes up to 20 feet long.

Send for circulars and estimates.

**LOCKLAND LUMBER CO.,**  
LOCKLAND, HAMILTON CO., OHIO.

**PIPE AND FITTINGS FURNISHED**

— TO —

PLANS AND SPECIFICATIONS.

Contracts solicited for  
HEATING GREENHOUSES.

Most improved plans.

ALL WORK GUARANTEED.  
Prices furnished on application.

**E. A. STIMSON & CO.,**

No. 22 and 24 Sears Street,

DAYTON, OHIO.

**GOLDMAN'S ATOMIZER AND SPRINKLER**

FOR A THOUSAND AND ONE USES.  
COMMENT UNNECESSARY



Practical  
and Useful.

You will  
not part  
with it.

For Flowers, Window Gardening, House Plants, Destroying Insects, and for various fine sprays. Most natural substitute for fog or dew. By dipping in water while closed, this instantly. Rail finely perforated; spray controlled by pressure of hand. Size of common squeezer. Weight, 5 oz. Exclusive Territory to Agents. Sells on its own merits; no talk. Sample by mail free. This is the Atomizer that sold so well at the Danbury, Albany and other Fairs. Florists and Seedsmen, show it to your customers; sells fast; good profit. Excellent for indoor plants. Send for illustrated pamphlet and price to the trade. Mention this paper.

**M. GOLDMUN, Manufacturer, Pittsfield, Mass.**



## Index to Advertisers.

Adams, C. T.	558
Adams, R. W.	559
Allen, C. H.	555
Advertising Rates, etc.	551
Allen, W. S.	551
Baile, F. A.	555
Bayersdorfer, M. M. & Co.	558
Bernard, E.	549
Berger, H. H. & Co.	551
Blanc, A.	559
Bock, Theo.	559
Boysen, Jas. L.	549
Brackenridge & Co.	559
Brague, L. B.	558
Breneman & Petterson	557
Buthers Ind'l Gard's	558
Carmody, J. D.	562
Chandler, B. B.	559
Classman, Geo.	559
Cook, J.	549
Cosgrove, J. A.	549
Crauton, Jno. & Co.	559
Currie Bros.	559
Curwen, John Jr.	559
De Veer, J. A.	559
Devine, Peter	561
Diez, John L. & Co.	561
Dillon, J. L.	551, 557, 558
Dreer, H. A.	558
Dunkley, Joseph	559
Eames, H. W. & Co.	558
Ellwanger & Barry	557
Elliott, B. A. & Co.	557
Fairfield, C. F.	549
Fassett, F. E. & Bros.	559
Fisher, Peter	559
Foster, F. W.	560
Garfield Park Rose Co.	551
Gasser, J. M.	551
Giddings, A.	555
Gouldman, M.	551
Grey, Benj.	559
Grimm, Jas.	559
Grimm, N. S.	557
Gurney Heater Co.	561
Hales, H. W.	551
Hallack, V. H. & Son	555
Hammond, Benj.	555
Hammond & Hunter	551
Harnan & Son	557
Herendeen Mfg. Co.	561
Herr, Albert M.	557
Higley, Henry G.	554
Hilfinger Bros.	549
Hitchings & Co.	562
Hooker, H. M.	562
Hulsebosch Bros.	554
Ives, J. H.	551
Jansen, Ed.	558
Josten, C. H.	554, 559
Kennick Bros.	551
King, James	555

Krelage, F. H. & Son	554
Krick, W. C.	560
Krueger, A.	549
Laine, Jno & Sons	556
La Roche & Stahl	551
Lockland Lumber Co.	551
Matthews, Wm.	559
McAllister, F. B.	555
McCarthy, N. F. & Co.	551
McFarland, J. Horace	557
McFarish, G. A.	559
May, J. B.	549
May, L. L. & Co.	549
Merrick, A. T.	549
Meyer, Andrew	556
Michel Plant & Seed Co.	557
Miller, Geo. Wm.	559
Monon Route	558
Moody, Polman	554
Myers & Co.	562
Palmer, Henry	559
Pennman, Jas. A.	551
Perkins, J. N.	560
Phila. Im. Design Co.	560
Plenty, Josephus	561
Quaker City Mch. Works	560
Reed & Keller	560
Reichers, F. & Schone	559
Roemer, Frederick	557
Rolker, A. & Sons	555
Schofield, D. C.	560
Schulz, Jacob	549
Seollay, John A.	562
Segers Bros.	555
Segers & Co.	555
Sheridan, W. E.	551
Shuppert, H. E.	555
Siebrecht & Wadley	559
Situations, Wants	549
Smith, H. B. Co.	561
Smith, Chas. & Son	561
Smiths, Powers & Lamb	561
Sponner, Wm. H.	549
Steffens, N.	560
Stewart, Wm. H.	561
Stimson, E. A. & Co.	561
Strauss, C. & Co.	561
Studer, N. S.	561
Thompson, G. & Sons	555
Thompson, J. S. H.	559
Van der Schout & Son	554
Van Zanten, G. V. & Co.	561
Vaughan, J. C.	561
Ware, Thos. S.	561
Weathered, Thos. W.	562
Welch Bros.	561
Whitlin Pottery Co.	560
Wilks, S. Mfg. Co.	562
Wilford, Geo.	551, 555
Wolf, L. Mfg. Co.	560
Wood, I. C. & Bros.	559
Young, Thos. J. & Co.	561
Zimnibel, Benj.	555

With a Carmody Sectional Boiler you will have fuel enough to pay the cost of the Heater in a few seasons.



Send for Descriptive Catalogue.

**J. D. CARMODY,**  
EVANSVILLE, IND.



**GREENHOUSE HEATING**  
AND VENTILATING.

Superior Hot Water Boilers.

**JOHN A. SCOLLY,**

74 & 76 Myrtle Ave., Brooklyn, N. Y.

Send for Catalogue.

**GREENHOUSE HEATING.**  
BY A. B. FOWLER.

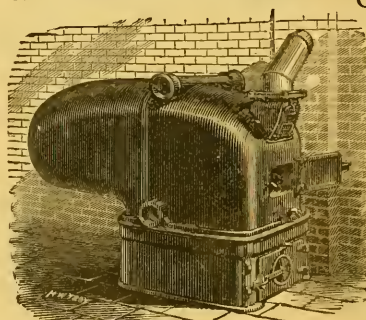
Explains fully all the best systems of heating greenhouses by both hot water and low-pressure steam. Tells you the points to consider in selecting an apparatus. How to adjust same to various locations gives the results of the latest scientific experiments. Shows how to compute the number of feet of pipe required for a given space; draft and other important matters. It is highly commended by Mr. John Thorpe and others. Postpaid, 75c.

Sent on receipt of price. Address,  
**AMERICAN FLORIST,**  
CHICAGO.



Sectional View.

## Greenhouse Heating AND Ventilating



Send 4 cents postage for Illustrated Catalogue.

## Improved Hot Water Boilers

For Heating

Greenhouses, Graperies,  
CONSERVATORIES, ETC.

ALSO

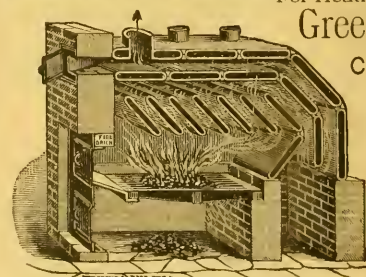
Cast Iron Pipe, Fittings, Valves and  
all Material for Heating by  
Hot Water.

Send for Catalogue.

**MYERS & CO.**

1173 So. 9th St.,

PHILADELPHIA.



THE CELEBRATED  
**WILKS WATER HEATERS!**

For Heating

GREENHOUSES,

DWELLINGS,

POULTRY HOUSES,

STORES, BATH TUBS,

ETC., ETC.

Send for Price List.

**S. Wilks Mfg. Co.,**

Cor. Monroe & Clinton Sts., Chicago



ALL SIZES OF SINGLE AND DOUBLE THICK

**GLASS FOR GREENHOUSES.**

ALL GLAZIERS' SUPPLIES.

Write for Latest Prices.  
Mention American Florist.

# THE AMERICAN FLORIST



America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. III.

CHICAGO AND NEW YORK, AUGUST 1, 1888.

With Supplement. No. 72.

## THE AMERICAN FLORIST

Copyright, 1888, by American Florist Company.  
Entered as Second-class Mail matter.  
Published on the 1st and 15th of each month by  
**THE AMERICAN FLORIST COMPANY.**  
GENERAL OFFICES, 54 La Salle Street, Chicago.  
EASTERN OFFICE,  
Room 15, Vanderbilt Building, New York.  
All communications should be addressed to the  
general office at Chicago.

### SOCIETY OF AMERICAN FLORISTS.

#### FOURTH ANNUAL MEETING

—AT—

New York, August 21, 22, 23, 1888.

WM. J. STEWART, Secretary,  
67 Bromfield St., Boston, MASS.

### THE MEETING

Will be held in

#### COOPER UNION,

At the junction of Third Ave., Fourth Ave. and  
Eighth Street, and the  
EXHIBITION IN NILSSON HALL,  
Fifteenth Street, between Third and Fourth  
Aves.; not in the Fifth Avenue Theatre as  
previously announced.

### New York Hotels.

Hotel.	Can accom-	Am. plan.	European
Grand Central,	moderate.	per day.	plan, per day
673 Broadway,	100	\$2.50-\$3.50	\$1.00-\$1.50
Morton House,			
Broadway & 14th	400		\$1.00
Fifth Avenue,			
Broadway & 23d,	400		\$4.00
Coleman House,			
Br'dway & 27th,	limited.		\$1.00-\$1.50
Sturtevant House,			
Br'dway & 28th,	50-75	\$3.00-\$3.50	\$1.00-\$3.00
Gilsey House,			
Br'dway & 29th,	300-400		\$1.00
Grand Hotel,			
Br'dway & 31st,	50		\$1.00
Hotel Royal,			
6th Ave. & 40th,	limited.		\$1.00
Gidney House,			
Br'dway & 40th,	limited.		\$1.00
Rossmore Hotel,			
Br'dway & 41st,	limited.	\$2.50-\$3.00	
St. Cloud Hotel,			
Br'dway & 42d,	limited.		\$1.00

Delegates wishing to secure rooms at any of the above named hotels can do so by writing to Theo. Roehrs, 153 West 31st street, New York; and if bodies of delegates coming will advise Mr. Roehrs at what hour and by what route they will arrive in New York, arrangements will be made for members of the New York Florists' Club to meet and escort them to the hotels.

IF YOU are going to exhibit at the New York meeting, call the special attention of the trade to your exhibit through the columns of the CONVENTION SUPPLEMENT which will be mailed with the issue of August 15, next.

### Exhibition Notes.

The New York club will offer premiums as follows:

- Best original floral design. . . . \$50.
- Best funeral design. . . . . \$50.
- Best dinner table decoration . . \$50.
- Best bridal bouquet. . . . . \$25.

In addition to the above premiums certificates of merit will be awarded by a committee of the S. A. F. to any other designs or exhibit which may be considered worthy of the distinction. It is hoped that the liberal premiums for cut flower work will induce a lively competition. Designs may be entered "not for competition" if desired. Diplomas and certificates will also be awarded for plants.

Intending exhibitors are requested by the committee in charge to communicate with Mr. John Thorpe, Pearl River, N. Y., as early as possible that arrangements may be made to give each exhibitor the space required.

### Railroad Rates to the Meeting.

We understand that no rate has yet been secured in the territory of the eastern traffic association, but a rate of one and one third fares for the round trip on the certificate plan has been granted in the territory of the western association, and the other association will undoubtedly follow suit before the meeting. All those at and west of Chicago can rest assured of this rate.

On the certificate plan the passenger pays full fare in going to the meeting and secures a certificate thereof of the ticket agent by request at the time of purchase, and this certificate when countersigned by the secretary of the society at the meeting, becomes authority for the sale of a return ticket over the same road, between the same points at one third fare, thus making one fare and a third for the round trip. Where the journey is made over more than one line it is necessary for the passenger to purchase separate local tickets and procure certificates thereof for each of the lines over which he travels in going to the meeting, as none of the lines honor the certificates of any other line. To be honored the certificates must be presented within three days after the date of adjournment of the meeting, and must not be secured more than three days prior to the commencement of the meeting.

Those west of Chicago, and who wish to travel from that point with the Chicago club, will purchase tickets to Chicago securing a certificate from the agent at time of purchase, and after arrival at Chicago he will be instructed as to further action. The Chicago club now expects to go via Pennsylvania R. R. from that point, but has not yet bound itself to any particular road. A rate of one and one third fares for the round trip can be de-

pended upon, and the club has reasonable hope of doing a little better, in which case the route which offers the best inducements will be accepted. The many names now in indicate that there will be a large party from Chicago on. The programme as at present arranged is to leave Chicago August 19 at 5 p. m., reaching Pittsburgh the following morning; passing over the Alleghenies by daylight and reaching New York at 10 p. m. on the 20th. This is on limited time and the passenger who spends the time counting the telegraph poles will have to keep steadily at work.

Full particulars, with every detail complete will be given in next issue, which will reach nearly all of our readers before they start for the convention.

### Convention Whisperings.

The Philadelphia and New York floral base ball team expect to calm the Chicago and Milwaukee nine at Iona Island August 24. A chance to get square will be given the vanquished at Queens, L. I., on the 25th. Ex-President Craig was in New York last week laying odds against the west.

W. S. Allen gave a pitching exhibition in his back yard to a few knowing lads. "He is far advanced in training," says Treasurer Cowan, "judging from the scarcity of cats in his neighborhood."

E. V. Hallock will entertain the boys and girls at Queens on Saturday, August 25, after the game. He will furnish over-night accommodation if it don't rain.

Florist Supply Jansen asked permission, at the last meeting of the N. Y. F. C., to furnish a collation to the delegates at his warehouses on 19th street, N. Y., at his own expense.

Steps are being taken to make the New York daily *Mail* and *Express* the official organ of the convention. Hon. Levi P. Morton made an earnest effort to fix his engagements to be present and take part in the opening ceremonies. His letter of regret is a warm and sincere one, evincing his great interest in horticulture. He owns three country establishments, and is one of the largest employers of garden and fancy farm help in the country.

Special arrangements have been made with Mr. Kearns, proprietor of the Ocean House at Coney Island, to take the best of care of the delegates and their families who may visit this famous resort during convention week. The Ocean House is centrally located and is famous for "home comforts," good, plain fare, and reasonable charges.

Capt. James Lynch, in full uniform, is said to be the finest looking tar-ier of them all. He is a devoted adherent of St. John, the Prohibitionist, on the high seas, but when ashore he adopts his tactics to circumstances.

Gus Messeberg, now on a dithering tour in Asia, writes home that he was on



board the "ark." Pity it was not chartered for the excursion, as some think the "Long Branch," which holds only three thousand, too small.

Detective Sergeant Tom Adams, of the Metropolitan force, will accompany the excursionists on their voyage up the Hudson. He recommends the boys to leave their "Waterburys" at home however.

Col. Elliott F. Shepard, editor of the *Mail and Express*, will deliver the address of welcome to the delegates at Cooper Union. He is one of the most popular of New York's distinguished citizens, and like his friend Dewey has an unlimited capacity for work, and never shrinks from any task that has for its object the advancement of a meritorious cause.

The Society of American Florists will henceforth hold the two great journalists high in their estimation. Geo. W. Childs for his gastronomical and Col. Shepard for his intellectual operation. They are singularly lucky to find a society to operate upon—but how about the society?

Professional base ball players will be strictly excluded from the florists' game. The players must be recognized members of the florists' fraternity. Ex-President Craig is making his book on this understanding.

William Elliott, the famous auctioneer, will take a prominent part in the opening proceedings of the convention. His speech will be patriotic and forcible.

Judge Cole, of Davenport, Ia., will meet with a cordial reception. The eastern boys are "laying for him."

Col. Hendricks, of Albany, will be one of the most conspicuous figures. "Begone dull care" when he explodes.

**WESTERN FLORISTS** who intend going to the New York meeting of the Society of American Florists next month, should arrange to travel from Chicago on the special train with the Chicago club.

**DUES FOR 1888.**—Dues may be forwarded to Wm. J. Stewart, secretary, 67 Bromfield street, Boston, Mass., before the meeting and thus lighten the secretary's duties and avoid the rush at New York.

#### New York Notes and Comments.

The annual election of officers was held at the July meeting of the Florists' Club. The popular president, Mr. J. N. May, was unanimously elected for a second term. Mr. W. S. Allen, who has worked hard for the club since its formation, was again elected secretary. Much regret was felt at the retirement of Mr. Peter Henderson from the office of treasurer, though a popular substitute was found in Mr. A. D. Cowan, who was borne to the chair of office by Messrs. Ernest Asmus and John H. Taylor, amid great applause. Mr. Taylor fills the office of vice president.

In addition to the election, reports of committees preparing for the convention were read. Mr. Cowan's report of the executive committee told among other things of the many interesting features of the projected excursion. The committee announced that distinguished orators would deliver addresses on that occasion, among them Mr. William Elliott. An attempt was made to arrange the base ball match so that it would not interfere with other features of the general programme. A little doubt was expressed as to whether this game could be considered specially beneficial to horticulture, or having any bearing on the subject,

but there was quite a strong feeling in its favor.

We are informed that Mr. James R. Pitcher, the well known orchid amateur of Short Hills, New Jersey, is about to enter professional ranks with a Massa chusetts orchid grower as business partner. This will scarcely be a surprise, for there seems a charm about the trade to many who begin as amateurs, and the professional army is constantly recruited by them. Probably the largest proportion of them go into rose growing.

During the summer a number of prominent city florists have decided to give a Saturday half-holiday to their employees. Among those who agree to this are Scallion, Alexander McConnell, Siebrecht & Wadley, Bogert, Buchanan, Humphrey, Butler, Hanft Bros., and others. With some few florists, however, Saturday is apt to be an exceptionally busy day, and consequently they are unable to give the holiday, but the general sentiment is in its favor, both amongst employers and employed.

There is little going on in the trade at present, but one interesting event is the flowering of the white variety of *Cattleya gigas* at Rose Hill Nurseries. This was imported from Colombia by Siebrecht & Wadley, in company with a lot of others, and its identity was not known until it flowered. So far as known, it is the only plant of the kind in existence. Mr. David Allan was requested to name it, and it has received the title of *Cattleya Rochelliana alba*. It is a large, strong plant, showing four flower spikes; the general character is that of *gigas*. The sepals and petals are pure white; the lip white with a faint blush of mauve. On each side of the throat is the yellow spot characteristic of *gigas*; the throat is pale yellow. The lip is beautifully curled around the edges. It really is a superb thing, worthy of taking rank with the wonderful *Vanda Sanderiana*. A fine plant of *Cattleya Dowiana* stood by it, increasing its delicate beauty by contrast. One would expect to hear of it in one of the show amateur collections; it would seem a pity to break it up, though it would doubtless make several strong plants.

Another novelty in bloom at New Rochelle is *Zygopetalum Sedenif*. This plant belonged formerly to the Morgan collection, but it did not bloom until put under the care of Mr. Rose, Siebrecht & Wadley's orchid grower. It is noticeable for its extremely dark color; the petals and sepals are deep purplish brown, with a narrow border of pale green; the broad lip is deep rich purple, slightly veined at the margin. It is a charming plant; the rich coloring is suggestive of an iris.

*Vanda teres* and *Miltonia spectabilis* are two striking orchids we see at their best now; the queer straggling growth of the *vanda* attracts the unprofessionals, as well as its showy flowers. The *miltonia* is almost as showy as *Odontoglossum vexillarium*, while much easier of culture. Both these plants are in bloom at Rose Hill, where indications point to a fine show of bloom next season.

A good idea in setting up greenhouse benches seen recently is to stand the posts on stones, instead of putting them into the ground. The posts are braced across, so as to stand firm, and cement is applied over the stone and around the post. This makes it perfectly firm, and undoubtedly preserves the wood. The benches are first painted well with crude oil, and then have a dash of hot lime put over them, preserving the wood and preventing fungus.

*Hydrangeas* in good bloom are useful now for show, because so little else is flowering. The florist may have as many blue flowers as he wants by watering *otaka* or *rosea* with a solution of iron filings; a table spoonful to a can of water about once a week. The plants should be partially shaded. The deepest blue is produced from *H. rosea*.

Sub tropical bedding is certainly more popular, but crotons are not as much used as they deserve to be. They make a superb show, especially in the vicinity of darker green foliage. But one thing needed especially in this class of plants is a unanimous scale of prices, such as the florists of some cities have adopted in bedding plants. It is a decided injury to the trade when each man charges a price of his own; there should be a general understanding in the matter.

EMILY LOUISE TAPLIN.

#### Baltimore Odds and Ends.

One of the prettiest things with me at this time is a bed of *Snow Queen* candy-tuft; the bed is a perfect mass of bloom and although the individual plants don't exactly bear out the catalogue engravings, the article as a whole is quite satisfactory. A corresponding bed that attracts much attention is filled with *Empress of India nasturtium*; it would be impossible to desire anything handsomer, every plant is a sphere of bright scarlet flowers, the general effect being considerably increased by a wide border of *Golden Bedder coleus*.

Last spring I purchased some seed of "New Carnation Striped Balsam"—something fine—and according to the reading matter on the package I got what I ordered. In due time the balsams were planted in a somewhat conspicuous bed, from which I anticipated much satisfaction. This beautiful July morning I can look out on that bed and ponder over the uncertainty of anything in the seed line, for every plant, with one solitary exception, is a fine example of single white balsam, the exception being an equally good specimen of single red. This is by no means the first time that I have had cause for conjecture as to the fate awaiting some ornaments of the seed trade in the mysterious hereafter.

The proverb that "All work and no play makes Jack a dull boy" is deserving of respect, not so much by reason of its antiquity as for the truth it expresses, and I doubt if there is any class of men who enjoy less recreation than the men engaged in horticultural pursuits, particularly those in subordinate positions. There can be no question as to the expediency of giving young men employed on commercial or private places an annual vacation of at least one week. Yet I know private places where the very life is ground out of young men by head gardeners unfortunately impressed with the dignity of their position. In commercial places the hours are generally irregular and at times severely long, unceasing care and industry is well nigh indispensable, but there are ever recurring calms in the trade, during which it is possible to give the hands a brief vacation. Employers sometimes "kick" about paying men for time they have not worked, but they will find that it generally pays, and pays well. A vacation voluntarily granted by his employer not only affords a man the opportunity to recruit himself physically, but it inspires him with renewed interest in his employers affairs and every man appreciates the value of an employee who takes an interest in his



VIEW IN THE CATTLEYA HOUSE OF MR. WM. MATHEWS UTICA N.Y.

work. My own lesson was learned in a pretty hard school, but it has always been my policy to give a subordinate all the "rope" consistent with proper discipline. The New York meeting will be a good opportunity for private and commercial florists to give one or more of their employes a pleasant and profitable vacation at what is probably the most convenient season of the whole year. I have not expressed myself as fully or as freely on this subject as I would like to do, but I am a strong advocate of the proverb quoted above and would be glad to see an annual vacation for young gardeners the rule in every establishment throughout the country.

A member of one of the "learned professions," whose leisure moments are spent in horticultural pursuits, has been telling me a piece of his experience

which it may not be amiss to repeat here. The gentleman's hobby is growing violets, and he has been so successful that last season he found himself with a considerable quantity of good flowers wasting on his hands. Naturally desiring to realize something from his labors he called on a Baltimore city florist with a view to disposing of his surplus flowers. The florist told him that violets were "worth absolutely nothing," but before leaving the store the gentleman observed a customer pay 50 cents for a very small bunch of those same worthless violets. The inconsistency of the whole affair struck my neighbor very forcibly, and he has been wondering ever since why the florist should charge a good retail price for flowers that were worth nothing at wholesale. The truth is a good many florists look on it as their duty to sup-

press an amateur the moment he displays any inclination to market his productions. They regard him as a positive grievance, a person whose operations have a baneful influence on prices and the volume of trade. It is impossible to prohibit any man from dabbling in floriculture if he is so minded, there is no law to prevent him from trying to sell the plants or flowers he raises, and he will seldom fail to find a market of some kind, if he can't do better he will sell on the streets, and street vending I have always regarded as particularly hurtful to legitimate trade. It would seem to me that the best policy for the dealer would be to take as much as possible of the amateur growers stuff off his hands and thus limit his field of operation, but whatever our individual views on this subject may be, it is certainly unwise to



be inconsistent in our dealings or to under-value either our services or our goods; such things do not tend to impress people favorably concerning the trade.

Having at divers times indulged in the popular pastime of abusing the Puritan rose I desire at this time to take some of it back, inasmuch as I have a plant outdoors that during the past two months has given me a goodly number of fine, pure white blooms. The plant is growing vigorously in a very stiff soil and every shoot means a flower. I had also an opportunity last week of gratifying a long abiding desire to see the Puritan as grown by Strauss & Co., of Washington, D. C. In my next letter I hope to give some interesting details concerning this establishment, for the present it will suffice to say that their Puritan house—150 x 20 feet—was a treat to me; the plants were perfectly healthy, free from mildew and appeared to be blooming freely enough. S. & Co. think the rose does best in a temperature of 60°, but they are not particularly impressed with its value. I question if many growers will trouble themselves for the future with Puritan. Cornelia Cook is hard to beat as a white rose, when you can get it, and since the method of obtaining it has been so intelligently explained by "Connecticut"—P. 518. I doubt not that the country will be flooded next season with the magnificent florescence of Cornelia Cook. It is only necessary to "supplant its warring structures by a cymose form of branching," after which "uninterrupted root activity, young and ever-vigorous foliage, perpetual youth and incessant florescence" is just as easy as rolling off a log. I hope that A. P. M. is properly appreciative of the cultural directions dedicated to him by "Connecticut," if he isn't he ought to be. For my own part I can only say that having been raised, so to speak on such intellectual pap, the article was a treat I seldom enjoy, the only thing that dislodged the writer was the French phrase at the end.

During the recent trip of the Baltimore Florist Club to Washington, D. C., the writer—as Baltimore correspondent of the *FLORIST*—was the recipient of special courtesies from the Washington brethren, especially Messrs. Freeman and Strauss, for which he desires to express his indebtedness. A. W. M.

#### Baltimore.

Baltimore readers who looked for a report in last issue from our regular correspondent A. W. M., of the recent excursion to Washington, are informed that the non-appearance of a report from him was due to a misunderstanding at this office. A report having been sent in earlier by another Baltimorean, we gained the impression that Mr. M. had been unable to accompany the party, and the earlier report was in type before our regular one was received. Otherwise the report of our regular correspondent would have been used. Mr. M. is our regular Baltimore correspondent and any favors, or assistance extended to him in gathering news will be appreciated by us.

#### The Present Fashionable Bouquet.

In the center and rising above a cluster of moss roses and buds is a bunch of cattleyas, pushing out from among which are sprays of odontoglossums or oncidiums. The dainty orchids fluttering over the pale lavender of the cattleyas and the bluish color of the roses with an edging of maiden hair ferns, proves a charming combination.

#### Long Island Plant Notes.

BY WM. FALCONER.

HYDRANGEAS, p. 548.—Both are forms of *Hydrangea hortensis*. The H. Japonica of Siebold and Zuccarini's "Flora Japonica" is not now regarded as a species but as a variety of *H. hortensis*.

HYMENOCALIS CALATHINA, p. 540.—The scapes average two flowers and the bulbs two scapes.

SINGLE-FLOWERED PÆONIAS are popular just now. Within the past few years the Royal Hort. society of London has awarded several first class certificates for these single pæonias. But I particularly observe that when I supply cut flowers of pæonias it is always "the large hand-



THE PRESENT FASHIONABLE BOUQUET.

some double ones" that are called for. Still the single ones are beautiful and we have room enough for both.

SINGLE FLOWERS.—In the case of roses, dahlias, hollyhocks, China asters, stocks, poppies, marigolds, Canterbury bells, carnations, violets and other popular flowers that have been well doubled, I find that they are much more popular than are the single ones. No doubt the single flowers may be just as beautiful and more artistic than are the double ones, but it is mighty hard work to get up as much enthusiasm in their favor.

OSTROWSKIA MAGNIFICA is now in flower in England in Veitch's Coombe Wood nurseries says the *Garden* July 7. This is the first notice that I have had of its blooming in England, and I have not yet heard of its blooming in America. I bought and sowed seed of it last spring but not one seed germinated. And although I had no better success with seeds of *Delphinium* Zalil, Mr. B. J. Townsend, of Bay Ridge, writes me that he has succeeded in raising two plants of this delphinium out of a packet of three seeds. Well, my packet was supposed to contain fifteen seeds.

AMONG SWEET PEAS I find white, scarlet invincible and black purple are much liked, also pink and white and the delicate shades of pink, but there is an aversion to the blue-purple, pink-purple or washy colors. If we grow the several sorts distinct and by themselves our own saved seed will probably be as good as anybody else's, but if we grow them mixed together our own seed will prob-

ably degenerate as we shall be apt to cut all the finest and best colored flowers and leave to go to seed only the poorest and least desirable.

ORNAMENTAL-LEAVED BEETS.—True, tastes differ and it is well they do. We have Brazilian, Chilian, Dell's and dracena-leaved beets, and all handsome enough in their way, but what on earth do we want with them in the flower garden? I know very well that they are used the world over in ornamental gardening, but I am sure we can get along well enough without them.

POPPY SNOWDRIFT is, I think, the best white fringed Marseilles poppy that we have got.

THE COMMON YUCCA (*Y. filamentosa*) now in bloom differs a good deal in variety. Mark the choicest and let them ripen seed, and when the seed is ripe gather it and either sow it at once in shallow boxes indoors or sow it in drills outside in spring. The seeds germinate readily.

A CRIMSON-PURPLE PIGWEED!—Yes, this is a coming novelty. Indeed the Chinese *Chenopodium atriplicis* is not uncommon as a crimson-purple, fine foliaged plant in our gardens, and the variety of it called *Victoria* is quite a choice selection. But the purple-leaved orach (*Atriplex hortensis atro-sanguinea*) is a commoner plant in cultivation and I think a more desirable one. Still, in the face of so many really permanent handsome plants available for summer gardening, I cannot reconcile myself to favor these pigweeds and orach, although for variety's sake, I usually grow some of them.

MILLA BIFLORA is one of the most desirable bulbous plants florists can grow in summer. Its flowers are white, star-like, wide open and on long stalks and command a ready sale. But the trouble with it is we cannot get up a big stock of it in a hurry.

AS I WADED waist deep through the sea of Kramper's irises in Hallock's nurseries and beheld the thousands upon thousands of magnificent blossoms, white, marbled and royal purple, single and double, and many eight inches across, and this too in common loamy soil in the open field and the heat of July, I could not help asking myself why don't the people grow them more than they do?

COREOPSIS GOLDEN WAVE is a variety I saw at Floral Park the other day. It is a compact bushy form of *C. Drummondii* and very free flowering. It is to day the best row of yellow flowers in their trial ground.

THE DOUBLE-FLOWERING *Coreopsis tinctoria* is also in bloom, but it is a miserable flower, ragged and indifferently double. It isn't nearly as pretty as is the ordinary single form of which we have so many shades of brown and yellow.

OF DRUMMOND PHLOX *fimbriata* also Star of Quedenburg (*cuspidata*) Mr. Childs has got some with as brilliantly colored blossoms as we find among the grandiflora race, but he also has got the common purple strain that I have. Decided novelties, but for cut flowers or garden display not as effective as the plain round flowered kinds.

THE BUTTERFLY WEED or *Pleurisy Root* (*Asclepias tuberosa*).—Although this is one of the finest and most showy of all our native perennials, and quite common, it is seldom met with in cultivation. This is because it is hard to transplant with success. It is propagated

from seed. Last spring Mr. E. S. Miller sowed some seed in rows in the open field and I find a good many plants although nothing like a full crop, are appearing. I sowed some seed in boxes last fall and wintered the boxes in a cold frame from which frost was not excluded, and in spring most of the seeds germinated.

CHILDS IS GROWING a lot of Zinnia linariis and it is doing nicely with him in the open field. It has been blooming with me for some time, and although quite pretty in its way, I don't think it has come to stay. The public don't admire single zinnias.

LUPINUS ALBO-COCCINEUS NANUS.—I raised a lot of plants of this—one of this year's novelties—lupin in the greenhouse in spring and planted them out in May. It came into blossom about the end of June, but the plants had a poor unhappy look about them. "It is said to grow little more than a foot high, the lower half of the flower spikes being of a fine rosy crimson color, and the upper portion pure white." That was the seedsman's description. My plants grew about a foot in height and bore white flowers only. It was a miserable disappointment, but I thought my treatment might be amiss and resolved to try again. The other day at Childs' I also found this lupin growing in their seed grounds, and in exactly the same woeful, wretched, measly condition that my own plants were in. Guess it is pretty poor stock for our gardens.

LOUIS SIEBRECHT has finished potting his callas. They are stood on the ground—not plunged—out of doors. His chrysanthemums, stevias, heliotropes, bouvardias and poinsettias are in pots in rows some 2½ feet apart, and the pots are partly buried in the ground by having the earth drawn up against them and to within about an inch of their brim; he says this is a much better way than to plunge them into the level ground. He waters the bouvardias when necessary, but to the chrysanthemums, stevias and poinsettias he has not yet given any water since they were set out of doors; the summer so far has been moderately moist; being plunged on the ground prevents the earth in the pots from getting unduly dry, and he does not wish the plants to grow too rank so early in the season.

#### The Climbing Hydrangea.

Although this interesting and desirable Japanese plant has been in cultivation in our gardens for a dozen years it is yet rare. I first had it in '78, I first heard of its blooming in the east in '81, and the first plant I saw in bloom was in '82 in the late Marshall P. Wilder's garden, but since '80 it has bloomed in several places in the eastern states. A few years ago Peter Henderson made a specialty of it and sold an immense number of plants; other nurserymen and florists had to follow suit but in a desultory way till now the "boom" has collapsed. Many buyers were dissatisfied with their purchase and through a lack of appreciation or knowledge of the nature and requirements of the plant lost it, but the fault was theirs and not the plant's. It is really a beautiful and useful plant, and occupies a place in ornamental gardening unsupplied by any common or "older" subject.

It is a deciduous, high-climbing perfectly hardy vine, and it climbs up and around and fastens itself to the trunks of trees by rootlets in the same way as does

the European evergreen ivy or the comely Boston (*Ampelopsis tricuspidata*) ivy. It will also attach itself to the face of any rough skinned wooden or stone work. At first it is of slow growth, but after a few years it runs rapidly. It does not bloom till it is several years old, but strong plants bloom every year, and, of course the older they become the more flowers they will bear. It comes into bloom early in June and lasts in beauty for several weeks. The flowers consist of very large, broad corymbose cymes.



THE CLIMBING HYDRANGEA.

The heads are "single," that is, the outer florets are sterile, showy and white, the inner ones fertile, greenish and not showy. But the immense flat-headed cymes, even if not showy, have a striking effect and as the vine is close-growing and very leafy it becomes a handsome climber.

Ever since its introduction to our gardens there has been a good deal of confusion about its proper name, and it was generally catalogued and sold under the name of *Schizophragma hydrangeoides* and which was a mistake, as it is the true *Hydrangea scandens*. The *Schizophragma* is a much rarer plant. I have seen it in bloom only once, a month ago, at Flushing where it was growing to a support against the residence of Mr. S. B. Parsons. Its manner of growth is in the way of that of the *H. scandens*. "The flowers are arranged in a loose spreading many-branched corymb six or eight inches across, each branch terminated by a pure white petaloid, oval leaf nearly an inch long, corresponding to the petaloid calyx lobes of the ray flowers of the hydrangea, but with only a single division developed, and with no other trace of the flower remaining. The small, perfect flowers are greenish yel-

low." Prof. C. S. Sargent, who was also present, recognized the *Schizophragma* at a glance, but none of the rest of us knew it at all. Mr. P. had it under the name of *Hydrangea scandens*. It also is one of the gems of Japan, and one of the many whose blossoms first appeared to us at Flushing. WM. FALCONER.

[Our illustration represents a specimen growing upon the estate of Louis M. Meyer, on Staten Island, N. Y. The vine has grown to a height of forty feet, trained on a chestnut tree sixty feet high. One hundred cymes of blooms are pendant from the vine which has been in cultivation eight years.]

#### Hydrangeas.

In one of your recent issues an inquiry was made by somebody as to "How to grow small hydrangeas with one or two good sized heads of bloom," and having raised such plants for some years past, I will try to answer the question, by giving my way of treating them.

In the first place the cuttings are made of half ripened wood in August or September in a frame with a little bottom heat, or in a house, shading them well from the sun. As soon as rooted they are potted off into 3-inch pots, kept in a house until the pots are well filled with roots, withholding water gradually until ripened off. Care must be taken not to start them into growth by too much heat, but just give them warmth and moisture enough to produce roots freely and swell out the buds. After they are all well ripened and the leaves begin to turn yellow set them into a cold frame or a cool house for the winter, and protect them from severe frost; a little freezing does not hurt them if they are in a frame with leaves or some such material scattered among the plants. Short shavings or coarse sawdust will answer very well. Leave them there until spring.

If you want them to bloom about the middle of May or beginning of June take them out the latter part of March or April; if they are wanted sooner take them out earlier. Now take them all out of the pots and wash the old soil from the roots in a tub or barrel of water, by pressing the balls gently until all is out, then give them a repotting into 4 or 5-inch pots, with plenty of drainage, and subsequently they may go into 5 or 5½-inch pots if necessary. The soil used in the operation should be ordinary rich, good loam. Water sparingly at first until new roots begin to form and do not give them too much heat before the flower buds are formed, or else you will have tall slender plants. They are to be placed near the glass and as the sun grows stronger better give the glass a light shading with naphtha and whitelead or any mixture of that description you may prefer. See that your plants are well supplied with water at all times and do not let them flag even once. When the buds commence to show give them some stimulant two or three times a week but not before.

The size of the flower depends on the general care the plants received since the first repotting; if you let them get dry occasionally, or set them too close together you may have a large percentage of small heads, or even no flowers at all, while if all their wants were administered to, you will be rewarded by extra large, well colored heads of flowers.

Another thing I should say here too, we are not growing *Hydrangea hortensis*, but *H. Otaka* for this purpose. The former may do in the same way; I have



not tried it, but Otaksa is naturally so much larger and of a much stronger constitution, that it is obvious, we should get far better results from that variety with less labor. Also the small plants are generally more profitable than the larger ones, for they do not occupy much room and may be grown on side benches, while the older and larger ones will require to be set a good distance apart, in order to give the air and light a chance to play around the plant, else the result would be bareness or yellow leaves in the lower part of the plants and altogether shabby specimens. Of course the same rule should be observed with the small plants, but as they have only one or two branches at the most, they do not shade each other so much as to require to be set very far apart. J. B. KELLER.

Rochester, N. Y.



For Summer Flowering.

In the course of my business correspondence I am often asked if the system of growing roses which I have practiced and advocated through the AMERICAN FLORIST is the most suitable for summer flowers as well as winter. I think it only due to your readers to distinctly state that the method of growing roses as described by me in this paper is intended solely for the purpose of producing roses for the winter season, or more correctly speaking, from October to June. Where roses are required for the months of July, August and September I would advise a somewhat different treatment.

To obtain the best results for these months the plants should be planted in their blooming quarters not later than the first week in May. They should be good strong well-established plants when planted and be grown on steadily, with an abundance of air at all possible favorable times. If planted on raised benches they should be so arranged as to easily give an abundance of water during very hot weather. As soon as they are required to bloom the glass on the roof should have a very thin shading, but where summer roses are absolutely necessary it would be advisable for the grower to plant one or two houses, according to his requirements, and proportion of glass eligible for this purpose, and plant them with a view to secure the best results.

For that purpose I would advise making a raised bed somewhat in the following manner (of course this as all other matters appertaining to the business, is subject to many changes suitable to the particular class of house each grower may have at disposal for the purpose): Rise the sides of the bed or beds to within five or six feet of the glass, either with planks secured to post or narrow brick walls, then fill these beds up to within six inches of the top with coarse stones, broken brick, cinders, or a like material to secure good drainage at all times. On this place the best rose soil at command, level with top of sides of beds. In this plant the roses, such varieties as experience has proved the most suitable for

the summer trade. A house of roses planted this way at the time indicated above can be kept blooming from July till January, and then is allowed to go gradually to rest, and become well hardened off before actually frozen (which can be done even at that season of the year by withholding water and giving an abundance of air for four or five weeks), the fire can be allowed to go out, or the pipe shut off altogether from that house, from then until May when the roses can be pruned, watered and mulched, started into growth and be made to produce a grand crop of flowers in time for the school commencements which is about the last week in June. With a little further care and liberal treatment they can be made to produce an abundance of roses till late in the fall again, and with, comparatively speaking, very little care, will continue to do the same every season for several years, always providing they get a good rest during the winter.

With many who had tried this method of growing them, it has proved a failure so far as really good summer roses are concerned, simply because they almost invariably try to make the plants keep producing flowers all the year round. This is in direct opposition to nature's laws. The rose in its native clime gets a season of rest, and it is not reasonable to suppose that it can be kept growing continually and yield the best results. Notwithstanding that some growers claim they grow and bloom their plants continuously winter and summer, they certainly cannot get the quality they could under more natural circumstances, any more than we could get good grapes from vines kept in a growing state all the year round. J. N. MAY.

Summit, N. J.

#### Rose Princess Beatrice.

Mr. H. Bennett, of the Pedigree Rose Nursery, Shepperton, has sent us flowers of one of the most charming tea varieties he has yet raised. We have seen it several times this season, always in the best condition, and as lovely a flower when fresh and half-expanded as one could wish for. Its beautiful shell-like petals are of the very palest cream-yellow, becoming deeper in the center, where there is a bright, shining rose-salmon tint to the margin, this color disappearing almost entirely with age. Its full, yet graceful contour, without a trace of coarseness, and delicate colors should give it a place amongst the finest of fragrant tea roses. Mr. Bennett remarks that it was sent out last June, and the flowers were cut from plants in the open ground that have had no protection during winter.—*London Garden.*

In connection with the above a Chicago florist writes: "As yet the Princess Beatrice has not had a fair trial. Some of the plants—a majority probably—were shipped by the raiser, Mr. Bennett, to Messrs. Craig and Hill for distribution in America. They were grafted plants, quite likely worked in March or April, and in due time a forced growth of from six to twelve inches followed; then the balls were shaken out—some quite clean, the tips of the soft growths nipped or cut off, all leaves removed (at least they arrived so), packed for shipment and on arrival re-shipped to buyer to be potted or planted out in the hot month of June. Is it any wonder that the poor things refused to grow freely, or that when they did it was by fits and starts few and far between? It is well to say that spring

grafted plants with soft growths and healthy leaves will stand a moderately long journey in May or June and grow right along, but to completely check a soft first growth, then subject the plants to the confinement and more or less heat and bad air of a steamer's hold—a journey of eight to ten days—repack and ship again, must result in a considerable loss of vitality hardly to be recovered during the balance of the growing season. I venture to say that the lost vigor will return in due time to the Princess Beatrice and that it will prove to be a good average tea rose—perhaps above the average."

#### Checking the Growth.

The man who always has "good luck" is he who never allows his plants to receive a check from any cause. After receiving a check in growth a plant may recover and be *apparently* no worse for it, but the damage is done just the same. You may not be able to discover any difference in the appearance of the plants, but the flowers will be fewer, poorer in color and size than from plants which have not received a check.

#### Life of Greenhouses.

Our statement that the average life of great houses probably does not exceed ten years has brought out considerable comment, many holding that the statement is about right while some maintain that it is too low, and still others contend that a shorter term would be nearer correct. Mr. D. B. Fuller, a Chicago florist, believes that eight years would be more nearly correct.

As further proof of the value of keeping up greenhouses Mr. Fuller said: A man who starts in with clean new greenhouses almost invariably has experience about as follows: First year, grand success; second year, does well; third year, has "fair luck"; fourth year, "poor luck"; fifth year, "very bad luck"; sixth year, can't grow anything. This of course applies to greenhouses which are not repaired each year and otherwise kept in good condition. The change in luck would not have come nearly so fast if the sash bars had been repaired each year, the houses kept sweet and clean and the same attention given as at first.

To get the best value out of a greenhouse it should be repaired every second year, and every year would be still better. Too often we find the florist who had last summer intended to "repair that house next summer," allowing it to go over still another year, as "it is such a job to take those plants out and then lug them all in again," and so it goes from year to year. Mr. Fuller states that after the sash bars have been left on the house for four years without repairing, it is cheaper to put on a new roof than to scrape and repaint the old bars.

#### The Life of a Greenhouse.

In 1877 we built sixteen greenhouses, 25 x 100 feet each, using well-seasoned yellow pine for gutters, rafters and bars, also for all the woodwork of the benches, on which slate was placed, yellow pine was used. Now, with the exception of a dozen or so of the rafters that gave way almost at once, (owing to being of unseasoned sap wood), this block of greenhouses has not cost us \$10 for repairs in eleven years, and by all appearances the whole "plant" will stand with comparatively little cost for eleven years more.

I am satisfied that if yellow locust is used for posts with well seasoned yellow pine for all other portions of the woodwork both outside and inside, the life of a greenhouse should at least be twenty years.

The great mistake usually made is to run up greenhouses in the cheapest and roughest manner with such materials as can conveniently be got at hand, and as a consequence, it is probably, as you state, that the average life is not more than ten years, but with a slight addition to the first cost, probably not more than 15 per cent in selecting the best materials, there is no reason, in my opinion, why a greenhouse should not stand in good working condition for twenty years. Experience has shown us that whether for benches, rafters or gutter plates yellow pine, if properly seasoned, will stand twice, if not three times longer than white pine. I saw some sashes last winter that had been in use in Richmond, Va., made of yellow pine that were upwards of fifty years of age, and that looked to me as if they might stand fifty years longer, because there was not the slightest sign of decay. I may say in this connection that although all our gutter plates are made of yellow pine, yet we have them painted with coal tar every three or four years; that is the only portion, however, of our greenhouse structure on which we use coal tar.

PETER HENDERSON.

Jersey City, N. J.

#### Built to Stay.

The Garfield Park Rose Co., Chicago, built two years ago a range of rose houses which for solid construction rather take the lead over any we have yet seen. These houses cost probably double those of ordinary construction but we firmly believe that they will prove eventually much cheaper than houses with wooden frames.



FIG. 2. CEMENT BOX AT BASE OF IRON POSTS.

Figure 1 shows the manner in which the frame is constructed, entirely of  $1\frac{1}{2}$  inch iron pipe. Each alternate bench support runs up to the purlin which is of  $1\frac{1}{4}$ -inch T iron firmly screwed to each rafter. Between the purlin and upright support is a block of wood which sets on top of the pipe and into the lower angle of the T shaped purlin. To secure the purlin firmly to the upright a piece of strap iron (shown enlarged in upper left hand corner of Fig. 1) passes over the purlin and the ends are secured to the upright by a bolt which passes through the strap and pipe. The roof thus se-

cured is as solid as could be asked. Another feature to be noted in Fig. 1 is that light T irons are bolted to the uprights below the bench and carry the hot water pipes so securely that they cannot sag or get out of shape. The planks which compose the bottom of the bench are merely laid in position while the side boards are fitted between the uprights; this makes a neater job but for ordinary rose houses the boards could be set on

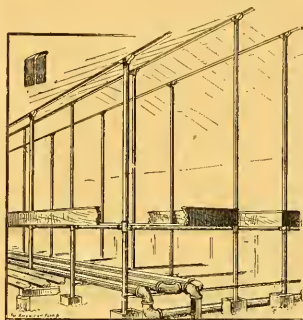


FIG. 1. SHOWING GENERAL PLAN OF CONSTRUCTION

edge inside the uprights and the soil in the bench would then hold them in position. Thus the bottoms and sides of the benches can be readily renewed at any time by merely removing the soil, lifting the old boards out and laying in new ones. The foot of each upright rests in a box of cement shown in

Figure 2. This is a box one foot square by three feet deep open at both ends (the board at bottom shown in illustration is an error on part of engraver). The box is set in position and filled about two-thirds full with cement; after hardening the upright is set in, with a flange at the foot as shown, and then filled with cement nearly to the top. This holds it down as well as furnishing an extremely solid foundation. The box will rot away but the cement will be a permanency. Further the cement extending above the surface of the soil will keep all moisture away from the foot of the pipe and thereby prevent rusting off.

Figure 3 shows the construction of the side benches, which is the same as the center with the exception that where a wall separates two houses the cross pipes, on which the bottom of the bench is laid extends right through the wall which provides at once a solid support at the back and against the bench sagging out from the wall.

Iron pipe and cement are destined to play an important part in the construction of greenhouses in the future and the sooner we begin building houses to last thirty years instead of ten the better it will be for us.

One florist who don't believe this says: "I don't want a greenhouse to last over ten years. After it is only seven or eight years old it is difficult to raise good stuff in it." Very true, when houses are allowed to get into the condition his are in; filthy and grimy pest houses when they are only a few years old. But first class houses kept *sweet and clean* will grow better stuff than ever came from his place (even when his houses were brand

new) if proper attention and care is given the contents. A good house is an important part of our stock in trade, but if the requisite care, skill and labor do not accompany it nothing of value will result.

#### The Cost of Growing Geraniums.

In answer to your query, "What does it cost to grow good 4-inch geraniums," I will try to come as near as possible to the actual cost and as we grow great quantities of them can give pretty close figures. The geranium being the most popular market and bedding plant is grown in such quantities that the market is generally overstocked. Now, we all know that over-production means lively competition and prices are put down regardless of cost of production, just so the plants are disposed of at any figure, especially in the plant business where labor and expense is not considered by a great many florists, they seeming to be satisfied when plants are all sold and think they are getting along fine. It is astonishing how the selling price varies throughout the larger cities, while the advantages of production are almost equal.

There is one point we must consider, that is "quality." Geraniums if properly grown require some attention and more space than those high staggers we often meet, with one large flower spike and two or three leaves that look as if they had the yellow fever and would better be sold by lineal measure than by the dozen or hundred. These plants after losing their bloom require almost a half year to produce another blossom, and if a grower has a lot on hand he sells them off regardless of cost. If they are sold for \$1 per dozen or \$7 per hundred it is almost impossible to get a better price for good plants as the majority of purchasers look to prices more than to quality. We grow more geraniums than anyone in our vicinity, making a specialty of them, and our plants are of the best in the market, having four to five

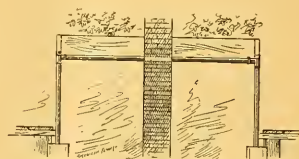


FIG. 3. SHOWING SIDE BENCHES, WITH IRON PIPE RUNNING THROUGH DIVIDING WALL.

branches with two to three buds or blooms on each 4-inch plant, but we receive no more per dozen or hundred than others do for inferior plants. Because they sell for \$1 per dozen we must do likewise in most all cases. You can often see a purchaser selecting plants and locking more to the flower than to the plant, and if a poor plant with a bloom stand alongside another that is a much better plant but has no expanded blossom, the former is taken in preference to the latter, though the plant may not be worth one third as much. The purchaser nowadays thinks to see is to believe, as he can not place any reliance on the representations of the majority of growers and dealers.



A house 10x100 feet will give 800 square feet of bench room, and one geranium properly grown in a 4-inch pot requires 36 square inches of space, that is four inches for the pot and one inch space each side; therefore 800 square feet would place 3,200 geraniums in 4-inch pots. Taking into consideration labor, pots, fuel, deterioration in value of greenhouse, interest on investment and your own valuable services, the expense of growing and disposing of 3,200 would be \$190, and if sold at \$.075 a piece, which is the wholesale price in our vicinity, would make the price of one plant \$.059, a margin of \$.017, which would allow about \$50 clear from that house, certainly not a paying investment, if the same space has not been utilized for other purposes the same season. Growing as many as we do I even find that they cost fully six cents a piece when marketed.

A large quantity of geraniums are also grown by vegetable gardeners in hot beds or small greenhouses, and they can grow them cheaper than others; on account of performing all their own labor which is not taken into consideration, as they have spare time to grow and market them with their other stuff and sell them at any price, just to get rid of them. The low prices of plants are mainly due to the ignorance or carelessness of growers, as the majority of them have no idea what it costs to grow their stock, for how many florists, or particularly growers, are there that keep any books, or know how they stand at the end of the year? From my own observations I doubt whether there are ten per cent. of them that keep any accounts excepting the charges that are made, and these are sometimes forgotten altogether or when the bill is tendered to the customer the amount is either less or more, generally the latter, than was agreed upon at the time of the sale. Some florists have so many different prices on the same plants that they can't remember unless they marked them down at the time, what prices they mentioned, but the purchaser rarely forgets them.

Pittsburg, Pa. E. C. REINEMAN.

#### Additional Houses and Expense of Maintaining.

"I expect to build two new houses this summer. I can heat two more with the same boilers just as well as not, and I won't have to keep any more help than now, so I will considerably increase my capacity without materially increasing expenses." Such is the course of reasoning indulged in by many growers.

Don't delude yourself with any such ideas. If you add two more houses on to your present boiler capacity you will have to crowd your boilers just so much more to heat them, and a boiler can not be run economically when it has to be crowded. As you increase the amount of work for your men, the quality of the work is lowered in proportion. They may be able to carry the extra houses through the season in fair shape, but the work in all of them will be less thoroughly done. You may stretch a rubber band over a pretty large package but the rubber grows thinner as the size of the package is increased.

The greatest trouble with the growers of to-day is not lack of houses, but inefficient management of those they already have. A large proportion of the greenhouses of America do not produce the quantity and quality of plants and flowers of which they are capable if conducted

on correct principles. Use better houses, more and better labor, do work thoroughly, and the receipts will sooner overtake and exceed the expenditures. Increase your capacity, not by adding new houses, but by increasing the quantity and improving the quality of the product from the houses you already have.

#### Cost of Production.

Being of same opinion as yourself that most florists or, at least, a good many sell their plants regardless of cost of production, and that some harmonious action to maintain living prices ought to be taken by all florists in every locality, I herewith give you the figures as existing in a large commercial establishment, taking one section of the greenhouses, which forms one-seventh part of the whole amount of glass and proportion the general expenses accordingly. While it may lack in exactness in a few points, I believe it will come very close to the true facts and figures as averaging through the entire country where bedding plants are raised.

#### COST OF RUNNING FIVE HOUSES, 11X100, IN A LARGE COMMERCIAL BUSINESS WHERE PLANTS ARE RAISED FOR STORE SALE AND SHIPPING TRADE, THIS GIVING ALMOST IMMEDIATE SALE FOR ANY SALABLE ARTICLE.

Interest on capital invested in five houses heated by hot water and the ground (valued at \$600 per acre), nominal value \$3,200 at 6 per cent per annum . . . . .	\$192 00
Wear and tear . . . . .	100 00
Repairing and repainting . . . . .	100 00
1,200 bushels bituminous coal at 12c a bu, . . . . .	144 00
Soil and manure . . . . .	100 00
Pots containing one half of plants as sold with pots . . . . .	150 00
Breakage on balance of pots . . . . .	25 00
Diverse material . . . . .	10 00
Fire and theft insurance . . . . .	40 00
Proportionate share of fireman's wages	
" foreman's . . . . .	75 00
" " packing and boxing . . . . .	100 00
" " team account . . . . .	50 00
" " water . . . . .	20 00
" " store expense . . . . .	100 00
" " Catalogue expense . . . . .	100 00
" " advertising expense . . . . .	50 00
" " postage on plants . . . . .	100 00
" " profit and loss . . . . .	50 00
Wages for one florist . . . . .	450 00
Wages for one boy . . . . .	200 00
Occasional extra help . . . . .	50 00

Total expense . . . . . \$2,281 00

#### INCOME FROM FIVE HOUSES, 11 X 100,

House No. 1 used for propagating and stock, giving a direct return besides furnishing the plants for No's. 2, 3, 4 and 5, we will say 10,000 plants at 3 cts. . . . .	\$300 00
House No. 2 for 2-inch pot plants from which No. 3, 4 and 5 houses are supplied and besides giving a direct return supplying other houses, mail plants, etc., say 15,000 at 3 cts. . . . .	450 00
Houses No. 3, 4 and 5 will hold 6,000 4-inch pots on first crop which will average \$8 per 100 . . . . .	720 00
Same houses from a partial second crop say 5,000 plants averaging \$6 per 100 . . . . .	300 00
Same houses from a third crop, 2,000 plants at \$6 per 100 . . . . .	120 00
Same houses from a crop of fall flowers and plants during August to December . . . . .	500 00
Same houses returns from cut flowers . . . . .	50 00
Same houses returns from space under the benches . . . . .	60 00
Total income . . . . .	\$2,500 00
Net profit . . . . .	\$219 00
	N.

#### Greenhouse Water Rates.

In your issue of July 15 reference is made to rates paid by florists for city water as being in many cases unreasonable and exorbitant. This is undoubtedly true as there is a great misconception by the water companies as to the amount of water used by florists.

It is now nearly twenty-five years ago that we first used hydrant water for our greenhouses in Jersey City. Having in-

formation that our water commissioners had got an exaggerated idea of the quantity used in greenhouses, I had a meter put in unknown to the office department of the water company. Our glass at that time did not exceed 40,000 square feet, and the first bill they sent me for a year's water was \$900; with some trepidation, I referred them to the measurement by meter, which for the same twelve months I was pleased to find, had registered an amount less than \$50. Our greenhouses and grounds where the hydrant water is used are now nearly eight times what they were twenty-five years ago, yet in no year have we ever paid more than \$300 for water, of course, all the time having it measured, as in the first instance, by meter.

A correspondent from Texarkana, Ark., has just written to me on this subject, saying that the water company of that town was going to charge him four cents per square yard of glass; I advised him to have his water measured by meter, when in all probability it will not exceed one cent per square yard, and maybe not more than one-half that amount.

There is a great misconception about the amount of water used by florists in their greenhouses and grounds. In all cities a large proportion of householders, where bathrooms are used, keep the water running night and day, using more water for a private dwelling than is used in a good sized greenhouse establishment, which is usually paid for at one tenth of the cost.

I am glad the FLORIST has opened up this subject, because no doubt hundreds of its readers are paying too much, owing to the exaggerated belief held by the water companies as to the quantity used for greenhouse work.

PETER HENDERSON.

Jersey City, N. J.

#### The Cineraria.

Over a century has lapsed since the introduction of this valuable decorative plant, and how great has been the improvement during this period may be inferred from the annexed figures of which C. cruenta has been prepared from plants flowered at Kew during the present spring, from wild seeds from the Canaries, while the types of cultivated forms have been kindly supplied by Mr. James and by Messrs. Cannell. So different is the species, both in habit and appearance, from the superb strains now in cultivation, that unless we had actual historical evidence of their descent, we might almost doubt whether the one could have been directly derived from the other. These wild plants varied from three to five feet in height, the habit was quite lax, the heads of flowers small, and with few (generally eight) ray-florets, the color lilac; and they formed a really elegant and graceful group as they stood on the floor at one end of the greenhouse. The descendants of this wild stock are dwarf and compact, with large heads of flowers of the most various shades of color, and including a series of so-called double forms of almost faultless shape. A glance at a series of these superb varieties, illustrates the survival of the fittest according to the ideas of the florist—a century of careful selection of the most decorative forms.

Cineraria cruenta was originally introduced to Kew by Mr. Francis Masson, in 1777, from the Canary Islands. There it grows on the north side of the Peak of Teneriffe, in what has been called the intermediate zone, and which is said to extend from about 1,500 to 5,000 feet



THE ORIGINAL CINERARIA WITH ILLUSTRATIONS OF ITS MODERN DEVELOPMENTS.

elevation on the mountain. It appears to be quite local as a wild plant. Lindley describes it as "inhabiting groves of laurels, myrica, faya, arbutus, heaths, ilex and other shrubs, among which the sweet chestnut and downy-leaved oak are naturalized, and associating with species of convolvulus, ranunculus, rubus, geraniums, strawberries, violets and similar plants. In these regions the air is moist, the sky is almost always overcast with clouds, especially during the day, while in the summer time fogs and mists are common, and in winter storms and heavy rains; there is no frost, and when snow falls upon the upper limits of the zone it melts immediately. The surface of the country is broken up into valleys and mountains, and the soil, though volcanic, is well covered with mold."

It is interesting to be thus able to picture to ourselves the plant and its native surroundings, and these conditions of climate, so different to the dry atmosphere of the lowlands of the Canary Islands, serve to explain the conditions under which it has been found to succeed best under cultivation. Judging by notes attached to wild specimens in the Kew Herbarium, it would appear to range from about 2,500 to 4,100 feet elevation, thus occurring in the very center of the intermediate zone, but not at its upper and lower extremities.

It is somewhat curious to note that

*Cineraria cruenta*—the cineraria par excellence of gardens, and long likely to remain so—should not be a cineraria at all, but such is the fact. *Cineraria* is a small genus of somewhat over twenty species, located at the Cape of Good Hope, with a solitary outlier in Madagascar. It differs from the world-widely distributed *senecio* by very slight characters indeed—simply in having a flat not a rounded seed-vessel. The plant under consideration is a *senecio*, unfortunately—the *S. cruenta* of De Candolle; though from the fact of its having been originally called a cineraria, a cineraria it is likely to remain, so far as gardens are concerned.

There are several old figures of the plant, and these show the color as purple, while all the Kew plants were lilac. —*Gardeners' Chronicle*.

#### Boaton.

The delegation from Boston to the New York convention will leave Boston via Fall River Line at 7 p. m. Monday, August 20. All New England members who wish to join the party should notify Benj. Grey, vice president for Massachusetts. His address is Malden.

Young Mr. Dawson, son of Jackson Dawson, of the Arnold Arboretum, sustained a very severe injury to one of his eyes recently and it is feared that he will

lose the sight of that, and possibly of both eyes.

The cut flower trade has been almost at a standstill here during the month of July. This is always a dull month, but this season it is exceptionally so. Most of the flower stores close at 5 p. m.

Among the most beautiful hardy plants now in bloom at the Arnold Arboretum are the native heaths (*Calluna vulgaris*) and several varieties of *Andromeda speciosa*. *Robinia hispida* is now flowering for the second time this season and is loaded with beautiful rosy racemes. A plant well worthy of a place in any collection is *Rubus fruticosus* fl. pl., the double flowering English bramble. Mr. Dawson's seedling of *Rosa rugosa* is a great improvement over the old variety.

On Monday, July 9, all the stock remaining on the estate of the late C. M. Hovey at Cambridge, was disposed of at public auction. The sale had been widely advertised and when Ed Hatch, the auctioneer, had mounted an old box under the shade of a pear tree, pushed his tall hat well over on the back of his head and in clarion tones announced that the sale was about to begin, his eyes rested on a crowd big enough to cheer an auctioneer's heart and which represented every state in New England. It was a wise foresight which arranged that the sale should take place before pear time. Many eyes were cast upward with a hungry look,

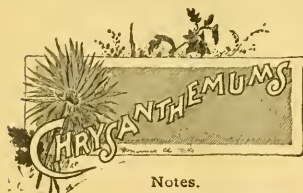


but alas, the pears were green and sour.

The sale commenced in the morning and it was well on toward evening when it was concluded, and during the whole afternoon Jim Barrett presided over a feast in the big barn, consisting of a great run of coffee, a barrel of crackers and a box of cheese, all of which was highly appreciated and well patronized by the boys in the absence of anything more tempting, for unluckily Cambridge is just now a kind of "third party" city. The stock was, in the main, in woeful condition. The plant six feet high in a 4 inch pot, the plant six inches high in a 12-inch pot, the plant that "cost five guineas twenty years ago to import," and had never yet found a customer, the plant where the weeds in the pots were the biggest, these were all represented in goodly numbers, but far more abundantly represented, over-running everything was mealy bug. Mealy bug, not as individuals, but as clumps, whole colonies, so that he who took a walk through the camellia house came out looking as though he had encountered a snowstorm. And Massachusetts may well congratulate herself that a large contingent of this mealy bug settlement has emigrated to New Jersey on the plants purchased by Mr. Manda, and to Florida on the bargains secured by Mr. Temple.

Considering the quality and condition of the stuff no fault can be found with the prices realized. Some of it was dear at any price, and that which was really good brought all it was worth, and in some cases prices astonishingly high. The final disposition of the old greenhouses and land has not yet been decided upon.

W. J. S.



Notes.

**Mildew.**—In damp weather mildew spreads quickly if not checked in time. A small caustic having a perforated lid is a good means of applying the sulphur to the surface of the leaves. Choose a dry day, so that the leaves are not wet, as sulphur applied to wet foliage loses much of its efficacy.

**Tying.**—Almost daily attention is required to keep the new growths secure from high winds and heavy rains, by tying the branches securely to the stakes. At this stage they are very brittle and quickly snap off if the shoots are allowed to buckle, that is, the top tie being so tight that the ligature does not move up the stake as growth progresses. More shoots are broken by this careless method of tying the stems than almost any other cause. Experience of this will only prove to the operator the importance of loosely, yet securely, tying the new growth to the stakes as it progresses. It is not a little disappointing to find two out of three branches broken off a plant, and perhaps this is a new variety and the only plant.

**Removal of Suckers.**—There is a right and a wrong way to perform what appears to many a trifling operation. Much harm may be done to the plants by doing it carelessly. Suckers or offshoots spring freely from the base of most varieties,

though there are some that are very shy in producing suckers. In all cases if they were allowed to grow they would rob the plants of strength, which should be utilized in a much better manner until the flowers are being produced. After that period no harm is done by allowing the suckers to extend for the production of cuttings. The safest manner is to break them off with the finger and thumb. In careful hands a knife may be used with advantage, but care should be exercised that the surface roots are not injured by the operation, or one more check will be administered to the plants.

**Earwigs.**—I have never seen earwigs so destructive to chrysanthemums as they are this season. We have already lost several points of leading stems through their depredations. The small earwigs are equally as destructive as the larger ones, as they are more easily hid when young, and stand a better chance of escaping notice. Earwigs coil themselves up in the young leaves, and in a very short space of time the extreme point is eaten out of the plant, thus necessitating a new start into growth. Great care is necessary to find them. I know of no other means than handpicking for removing these pests when once located in the shoots. Trapping them with small pots partly filled with dry moss and placed upside down on the top of a stake, and a little later on with dry bean stalks, six inches long, thrust among the leaves, are good plans.

**Taking Notes.**—Young growers of chrysanthemums who wish to become proficient in the culture of this flower for exhibition should take careful notes of the varieties as growth progresses. It is only by hard practice and a determination to excel that a beginner can hope to succeed. Taking notes I have found of the utmost benefit; there is a method to be followed even in this. Especially should be noted in separate columns the names of varieties—the date when propagated—when first break, crown and terminal buds were "taken"—at what height from the soil these natural breaks were formed—how long each requires to reach that stage—how the blooms develop later on from each bud—when feeding the plants commences, and with what stimulant, and how and when—when they are housed—after treatment—what size the buds of certain kinds were at that time—the time from the date of housing each variety required to develop, and how long the blooms remained fresh after expansion—the size of each bloom both in diameter and depth. These notes, if taken copiously and in a careful manner, will prove most useful if studied during the following season. By such observance the peculiarities of varieties are ascertained and a repetition of former mistakes can be avoided. Persistence in studying the note-book will do much toward achieving success when November comes round again.—E. M., in *London Garden*.

#### Some Choice Samples.

A sample flower order: "Will you please give bearer some choice flowers. Something that is nice and that will break a heart. I enclose a quarter."

A sample plant order: "Enclosed you will find \$1 for which please send by return express 100 pansy plants, the very choicest you have. Would like pot plants, and if they are satisfactory I will send a larger order later."

A sample consignor: "Dear sir; I have six very good strings of smilax to

dispose of, so I thought I would drop you a few lines and see if you would like to have them and how much you would give for them."

A sample customer: "Sir; I telegraphed for \$3 fancy roses. You know very well that I wanted assorted roses. If I had wanted 50 Mar. Niels I should have said so. If you think I shall submit to any imposition you'll get left. You are dealing with a different kind of a rooster. I feel now as though I would like to shove the whole box of flowers down your throat, and if you were here I should try mighty hard to do it."  
Boston. W. J. S.

ROCHESTER, N. Y.—At a meeting of the Flower City Florist club held July 3, a discussion was had as to the advisability of continuing the meetings of the club, some recommending that the club be disbanded, certainly a very unfortunate state of affairs, in view of the amount of good which can be accomplished by such an organization if rightly conducted.

#### SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words each insertion). Cash must accompany order. Flats ads. not admitted under this head.

**SITUATION WANTED.**—By a competent gardener: 14 years' experience; private or commercial. Florist, box 44 Mattawan, Dutchess Co., N. Y.

**SITUATION WANTED.**—As foreman by a practical rose and cut flower grower; single; best of references. Address: E. C. care American Florist.

**SITUATION WANTED.**—By a thorough rose grower and planter. Sober and industrious. Best of references. Address: P. M., care American Florist, Chicago.

**SITUATION WANTED.**—As foreman or manager. By a first-class gardener; 25 years' experience in private and commercial places. German. Address: A. M., Box 555 Omaha, Neb.

**SITUATION WANTED.**—By a gardener of 9 years' experience. First-class references from England, Germany and France. Address: A. care American Florist, Chicago.

**SITUATION WANTED.**—By a first-class rose grower, of long practical experience in all branches, both in commercial and private gardening. Address: C. L., Amesbury, Essex Co., Mass.

**SITUATION WANTED.**—Florist's foreman or general manager. Fully competent; 25 years' experience. First-class English and Canadian references. Address: J. H., Niagara Falls, N. Ont., Can.

**SITUATION WANTED.**—By English gardener and florist, first-class rose grower; 8 years' growing roses for New York market. Disbanded August 1; 10 years' experience; best of references. Address: age 35. Address: Box 18 Turrytown Heights, N. Y.

**SITUATION WANTED.**—By a first-class gardener; single man (German); 12 years' experience, and competent in all its branches, either for a commercial or private place. Can give best of references. Address: FRANK BEN, 343 Buttonwood St., Phila., Pa.

**SITUATION WANTED.**—By competent florist and gardener; German; middle aged; single; understands all branches, private or commercial. Can come at once if desired. For information, address: WM. K., gardener, care Johnson & Stokes, 219 Market street, Philadelphia, Pa.

**WANTED.**—Three thousand feet of second-hand 4-inch greenhouse pipe in good condition. Address: H. H. Jones, Bucksport, Me.

**WANTED.**—Florist and gardener with small capital; will give good show. Address: A. S. PARSON, Garden City, Kansas.

**WANTED.**—A quantity of 4-inch greenhouse pipe in good condition. Address: DR. G. W. LITTLE, Glens Falls, N. Y.

**WANTED.**—To buy a few plants of Yellow Banksia roses; also the true Belgian Honeycuckle. Address: GEO. THOMPSON & SONS, Louisville, Ky.

**WANTED.**—To rent, (or employ a florist and gardener to run a small greenhouse and five acres of ground) for full particulars address: A. S. PARSON, Garden City, Kansas.

**WANTED.**—A married man, to begin work first week in September; one who has had experience in general greenhouse work, such as potting, shifting, tramping, etc. Will furnish nice, comfortable cottages for men and small family. No "head florist" wanted; but a good, straightforward man who is willing to learn; write lowest wages expected, with house rent free. Mention references. German man preferred. Address: N. S. GRIFFITH, Florist, Independence, Missouri.







## THE CUT FLOWER TRADE.

### August Floral Fashions in New York.

Funeral work goes on the same at all seasons in the floral stores; it is always handsomer during summer months for more time is then given to designing and making up. The casket covered entirely with flowers is at present favorite, elaborate orders being all for this style. There is a solid massing of the casket with white roses and lilies, with bands of some large clusters like hydrangea bordering the edges. A casket was lately decorated on a pier, on its arrival from Europe and before it was transferred to a private car. The top of it was covered with lilies of several varieties, and the sides were trimmed with garlands looped at even distances and caught into a bunch of pink roses and lily of the valley. Designs such as wreaths, crosses, etc. are not in vogue for funeral gifts. Sentiment seems to be expressed by flowers and not forms. Baskets of forget-me-nots, boxes of lilies and vases of white blossoms are sent for offerings to the dead. Mounds of cattleyas and Eucharis amazonica come the nearest to a design of anything sent to a funeral by first class florists lately.

Fashionable floral work is aired almost entirely at watering place resorts, and in country houses at present. Some very handsome table embellishments have been arranged this week for dinners given out of town. A variety of flowers appears on the board at one time, an innovation somewhat novel. On a center of ferns are clusters of roses, carnations and lilies, each bunch alternating the fashionable colors of yellow, white and pink. Perle roses, Hinsdale carnations and longiflorum lilies are the usual blossoms. Green arrangements are considerably in vogue for dinners, but light tracery on a rich cloth is more the rule than heavy center pieces. Cream colored satin and linen damask cloths are used and a simple embroidery of natural fern fronds is made around the board just above the covers. Favors are universal at dinners. They are corsage bunches of ferns, with a single rose, a few moss buds, or a few small blossoms, in the center. Pond lilies are not fashionable for table ornamentation this season, but they are much worn at seaside resorts for belt bunches. The choicest corsage bouquets are formed of Marechal Niel roses with a few pink buds at one side.

The hand bouquet with a fringed center continues the most fashionable. Oncidiums and lily of the valley are used for the center fringing of the handsomest, in fact, this style of bouquet can not be made up effectively without fine blossoms for the center. Large bouquets of pea blossoms have fern centers frequently, and a band of Eucharis amazonica or gardenias will have a loose center of fine ferns.

Panels with easel backs seem to have taken the place of baskets for steamer gifts. These give opportunity for a fine show of flower weaving, for most of them are diversified with some graceful design on a background of ivies or carnations. A spray of stephanotis, or an artistic cluster of Marechal Niels is the adornment sometimes. A panel with the top pointed crown fashion is the latest introduction. The monogram or coat-of-arms of the person departing is worked out on it. It is most always made up of golden flowers.

Evening dresses for August will be trimmed profusely with foliage. Lace and tullegowns are garnished with asparagus vines and fern fronds, but the former are preferred. The armhole is defined with foliage, or if the sleeve is worn its elbow puffs are trimmed. Tucks or flounces on the skirt are headed with a tracery. This is simple garniture and easily put on. Natural flowers are worn in the hair considerably. Puffs and bow knots are held by gardenias, field daisies and rose buds. FANNIE A. BENSON.

### Random Notes, London.

The London florists use some foliage with all their button hole and corsage bouquets; a carnation will have a few sprays of its own foliage at the back of it, a Jacq bud will have besides a background of its leaves or a spray of agrostis; this latter is used also with corsage bouquets of say five or seven roses. Moss rose buds are sometimes set in and above the larger roses in like bouquets.

A large trade is done by flower women sitting at prominent corners. The sellers are mostly women of middle age, 35 to 50 years old, and the regulation outfit is a round willow covered basket about the size of a bushel measure, which contains just now large sized bunches of roses, sweet peas, ferns and carnations. These with a smaller basket filled with moss, a coil of wire and some thread completes their stock. They sit about the fountains and public buildings and all like spots so much sought by the American "fakir" and arrange the flowers in buttonhole and small round bouquets. The smallest they frequently tie on sticks a foot long and set upright in their basket of moss, which standing on the larger basket brings the nosegay very near the passer's eye.

The English railroad right of way spaces along the tracks are very economically used for vegetable growing. Very little waste land permitted. Some tool houses have flower gardens on the roof, a beautiful economy. Many young forest trees are planted along steep banks of the railways, and I noted a great variety among them.

The brightest yellow pot and window plant is the *Calceolaria rugosa* as grown

here. The top is a perfect mass of yellow bloom. They are sold in Covent Garden Market in 5-inch pots, plants say two feet high. They are mostly grown from cuttings.

White geranium *Queen of the Belgians* is much used as a pot plant in the market; so is the pink *Robert Hayes*, which is very highly thought of. J. C. V.

### A National Flower.

The idea is delightful, not only to us as florists, but to all "Young America" as well. It would seem not so difficult to choose a flower as to unite in accepting one. Yes, let them keep on "nominating" until they reach—begging your pardon—the golden rod, a hardy, lasting and telling flower, and as the school boys say out west, "it grows all over."

It can be pressed and preserved; can be painted on fabrics, it is suited to all complexions; in jewelry may be made in gold; would be lovely in relief on a background of silver or of blue enamel. It has the historic charm of having been used ages ago by the Druids in their mystic ceremonies. It could be used in gold to point the flagstaff above the national colors. Finally it would be readily understood abroad to signify: the gold is for our friends, the red is for our enemies.

Sturgis, Mich. NELLIE M. SMITH.

Would it not be well for the Society of American Florists to take a vote on the subject of a national flower at the coming convention? As our country is made up of many nationalities and has such a range of climate wrought to have some composite flower that is found over a wide range of country. I nominate the golden rod (*solidago*). II.

In reference to an article in the A. F. issue of July 1, page 558, regarding our national flower, I nominate the "golden rod" (*Solidago aurea*) as our national flower, and *Rhus toxicodendron* as a national nuisance. GEO CLASSMAN.

Sing Sing, N. Y.

In the choice of a national flower, why not give our native "water lily" a chance? It is a noble flower, a general favorite, and at home in nearly all of the states. Please put it on your list!

Lockport, N. Y. CHAS. L. DOLE.

I am also interested in the suggestion as to our national flower. I nominate our native golden rod. It is popular and has a very pretty, graceful flower and grows wild all over the country.

Sandusky, O. MISS LOU MATERN.

SEND IN your adv. now for our Convention Supplement to be mailed with next issue. Copy should reach us by August 8 at latest, earlier will be better.

**THE AMERICAN FLORIST**

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 Cents a Line, Agate;  
Inch, \$1.40; Column \$14.00.  
Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per  
cent; 12 months, 20 per cent.

No reduction made for large space.

The Advertising Department of the AMERICAN  
FLORIST is for Florists, Seedsmen, and dealers in  
wares pertaining to those lines ONLY. Please to  
remember it.

Orders for less than one-half inch space not accepted.

Advertisements for August 15 issue must  
REACH US by noon, Aug. 9. Address.

THE AMERICAN FLORIST CO., Chicago.

**Catalogues Received.**

Heury A. Dreer, Philadelphia, whole-  
sale list seeds, plants and bulbs; Albert  
M. Herr, Lancaster, Pa., smilax, ver-  
benas and pansies; H. H. Berger & Co.,  
San Francisco, Cal., bulbs and plants;  
Van Velsen Freres, Haarlem, Holland,  
bulbs; E. H. Krelage & Son, Haarlem,  
Holland, wholesale bulbs (American edi-  
tion); Ellwanger & Barry, Rochester, N.  
Y., strawberries.

WITH THIS ISSUE the AMERICAN FLORIST  
completes its third volume, which  
shows an increase of 54 pages over Vol. II.  
We started with a 16-page paper, but no  
number during the 1st year has contained  
less than 24 pages, while press of mat-  
ter necessitated one issue of 28 pages.  
With this issue we present a copious  
index of the volume which if bound with  
the numbers will add greatly to their  
value for reference. As soon as they can  
be bound we shall offer bound copies of  
Vol. III in style uniform with previous  
volumes at the price of \$2.25, postpaid  
by mail.

**Large Sale of Orchids.**

Benjamin Grey, of Malden, Mass., has  
sold his large stock of cut flower orchids to  
W. A. Manda, who will take them to  
New York. The price paid was not given  
for publication, but we understand it  
amounted to several thousands of dollars.  
This is the largest sale of established or-  
chids ever made in the United States to  
our knowledge, with the exception of  
George Such's sale at South Amboy, N. J.

**Heating Frames by Steam.**

Will some florist who has heated frames  
by steam please give his experience with  
details as to piping, etc.

Allegheny, Pa. THEO F. BECKERT.

RIPON, WIS.—The summer meeting of  
the Wisconsin Hort. society which closed  
July 2 was one of the most successful ever  
held. The display of flowers and plants  
was magnificent in quality. In early  
vegetables there was also a fine display,  
while strawberries were of superb quality  
and the finest ever exhibited here.

**CUT FERN FRONDS.**

Mixed. ADIANTUM GRACILIMUM, A.  
CUNEATUM, A. DECORUM, PTERIS  
CRETICA, AGRO-LINARIA, and  
ONCHICUM JAPONICUM,  
at \$1.00 per 100 fronds.

Regular shipping orders solicited by the grower.

**GEO. WITTBOLD,**  
WRIGHT'S GROVE, CHICAGO.

**JOHN CURWEN, JR.,**  
GENERAL

GREENHOUSE STOCK AND ROSES.

Villa Nova P. O., Delaware Co., Pa.  
Money Order Office: Bryn Mawr, Pa.**Wholesale Markets.****Cut Flowers.**

	BOSTON, July 26.
Roses, Teas.....	\$1.00
" Fancy.....	4.00
Lily of the valley.....	6.00
Sweet Peas.....	.75
Carnations.....	.50
Asiatic.....	1.00
Smilax.....	12.50
Adiantum.....	1.50
Pink pond lilies.....	10.00

	NEW YORK, July 26.
Roses, Perles, Niphetos, Souys.....	\$2.50
" Mermets, Brides.....	4.00
" Am. Beauties.....	10.00 @ 15.00
" Bon Silences.....	6.00
" Hybrids.....	6.00
" Bon Silences.....	1.00
" Gossies.....	1.50
Carnations.....	.50 @ 1.00
Gladioli.....	5.00 @ 6.00
Longiflorum lilies.....	8.00
Lily of the valley.....	8.00 @ 10.00
Corn flowers.....	1.50

	CHICAGO, July 26.
Roses, Perles, Niphetos.....	\$3.00 @ 4.00
" Bon Silences.....	1.50 @ 2.00
" Mermets, La France.....	4.00 @ 5.00
" Brides.....	5.00
" Bennetts, Dukes.....	4.00 @ 5.00
" Am. Beauties.....	8.00 @ 12.50
Carnations, short.....	.50 @ .75
Carnations, long.....	.80 @ 1.00
Smilax.....	12.00 @ 15.00
Adiantum.....	1.50
Tuberose.....	1.00 @ 1.50
Sweet Peas.....	.75
Pansies.....	.50
Callas.....	12.50
Gladioli.....	8.00 @ 10.00
Hollyhocks.....	1.00 @ 1.50

	PHILADELPHIA, July 26.
Roses, Bon Silences.....	\$2.00
" Perles, Niphetos, Souys.....	3.00
" Bennetts, La France, Cockles.....	4.00
" Mermets.....	6.00
" Brides.....	10.00
" Puritans, Brides.....	8.00
" Niel, Jacks.....	6.00
" Gossiers.....	4.00
Carnations.....	.75
Bouvardia.....	.50
Lily of the valley.....	10.00
Harris lilies.....	10.00
Callas.....	8.00
Smilax.....	15.00

**WM. J. STEWART,****Cut Flowers & Florists' Supplies****WHOLESALE**

67 BROMFIELD ST., BOSTON, MASS.

LILY OF THE VALLEY . . . . . \$ 6.00 per 100  
PINK POND LILIES . . . . . 10.00 "

**CUT FLOWERS AT WHOLESALE****N. F. MCCARTHY & CO.****WHOLESALE FLORISTS,**

63 Bromfield St., under Hort. Hall, Boston, Mass.

We have made large contracts with the best Rose  
growers about Boston to handle their entire stock  
this season. Our stock will consist of Papa Gontier,  
Bennett, Pierre Guillot, American Beauty, Mer-  
met, La France, Malmesbury, Cook, Bride, Niphetos,  
Perle, Niel, Anna Webb and Grace Wilder pinks,  
and some other flowers in variety. We shall have  
a particularly large lot of Mermets and Perles, so  
that in sending to us when you fail to get them else-  
where you will feel reasonably sure of getting them.  
Unknown parties must give satisfactory reference or  
let us send C. O. D. Write for information.

Mention American Florist.

**CUT ROSES  
AT WHOLESALE.**

The only establishment in the West growing Roses  
exclusively. 30,000 square feet of glass devoted to  
the growth of the Rose. We cut, pack and ship the  
same day, thus enabling the consumers to get fresh  
Roses without being handled the second time. We  
ship Cut Roses all over the country with perfect  
safety.

Also all the leading varieties of young Rose plants  
for sale.**GARFIELD PARK ROSE CO.,**1688 West Madison Street,  
Corner St. Louis Avenue, CHICAGO.

**W. F. SHERIDAN,**  
Wholesale & Commission Dealer

—IN—

**CUT FLOWERS.**

721 Sixth Avenue, NEW YORK.

Thos. Young, Jr., &amp; Co.,

**Wholesale Florists,**

INCORPORATED 1885,

20 W. 24th St., NEW YORK.

**W. S. ALLEN,****WHOLESALE DEALER IN CUT FLOWERS,**

36 EAST 23rd STREET, NEW YORK.

ESTABLISHED 1877.

Price List sent upon application.

**LaRoche & Stahl,**  
Florists & Commission Merchants  
—OF—  
**CUT FLOWERS,**

1237 Chestnut Street, PHILADELPHIA.

Consignments Solicited. Special attention paid to  
shipping. Mention AMERICAN FLORIST.**C. STRAUSS & Co.,**

TELEPHONE 977. WASHINGTON, D. C.

**WHOLESALE ROSE GROWERS**

AND DEALERS.

**LARGE STOCK OF ALL THE NEW ROSES.**

Orders booked for young stock at special rates.

**HAMMOND & HUNTER,**

Wholesale dealers in

**Cut Flowers and Florists' Supplies**

51 West 30th Street, NEW YORK.

**WELCH BROS.,**

WHOLESALE FLORISTS,

165 Tremont Street, BOSTON, MASS.

We make a specialty of shipping choice Roses and  
other flowers, carefully packed, to all points in  
Western and Middle States.Return Telegram is sent immediately when it  
is impossible to fill your order.**KENNICOTT BROS.,****WHOLESALE FLORISTS.**

ALL CUT FLOWERS IN SEASON.

Write for price list. Consignments solicited.

27 Washington Street, CHICAGO.

**CUT FLOWERS**

The choicest Cut Flowers at lowest market rates  
shipped C. O. D. Telephone connection. Use A. F.  
Code when ordering by telegraph. For prices, etc.,  
Address,

**J. L. DILLON, BLOOMSBURG, PA.****N. STUDER,**

Anacostia P. O., Washington, D. C.

WHOLESALE

**Plant and Cut Flower Grower**

— ALL CUT FLOWERS IN SEASON. —

Write for price list.

10,000 Coleus, Yellow Alternantheras and Achyras

thies from 2-inch pots, \$2.00 per 100.

5,000 Geraniums in good variety, from 4-inch pots

\$5.00 per 100. Larger lots, special prices.



## News Notes.

ST. PAUL.—The Minnesota State Hort. society held its summer meeting June 28.

NEW YORK.—Louis A. Hauser, a florist at 1012 Third avenue, was married July 16 to Ernestine Durlacher.

OGDEN CITY, UTAH.—John Chipp is building several new greenhouses and otherwise improving his place.

SYRACUSE, N. Y.—At the funeral of George C. Truair, a local journalist, several very handsome floral designs were used.

CHAMPAIGN, ILL.—The fifteenth annual meeting of the Hort. society of Central Illinois will be held here August 1 and 2.

MILWAUKEE.—F. P. Dilger has removed from Reed and Mitchell streets to his new place corner of Clement and Pryor avenues.

MIDDLEBURY, VT.—W. D. Lane has removed to Rutland, Vt., where he has erected about 8,000 feet of glass heated by steam.

ITHACA, N. Y.—Prof. Bailey, of the State Agricultural College of Michigan, is expected here soon to fill the agricultural chair of Cornell University.

WORCESTER, MASS.—Considerable trouble has been caused here lately by having plants and flowers stolen from private grounds. In addition shrubs and plants have been sadly mutilated.

CHARLESTON, S. C.—A plan has been formulated for a botanical garden and park at Summerville. Dr. Chas. U. Shepard, of this city, and P. J. Berckmans, of Augusta, Ga., have the matter in charge.

LITTLE ROCK, ARK.—J. W. Vestal is building two new houses, 18 x 125 each, for roses for cut flowers. Will heat by steam. Swinerton & Coleman are building four new houses for bedding plants. They will be heated by steam.

THOMASVILLE, GA.—The thirteenth annual exhibition of the Georgia State Hort. society will be held in this city August 1, 2 and 3. P. J. Berckmans, Augusta, is president, and T. L. Kinsey, Savannah, is secretary of the society.

ITHACA, N. Y.—Cook Bros. have built three new houses covering space of 2,508 square feet, and an office 18 x 24, the whole heated by steam. W. J. P. Foote is overhauling his houses and moving them across the street where he will rebuild.

SPRINGFIELD, MASS.—C. F. Fairfield has torn down three of his old greenhouses and is building a new structure embodying all the latest improvements. There will be three new houses 70 x 20 each and two 70 x 10 each, all devoted to roses and heated by steam.

ST. CATHARINES, ONT.—Thomas Holder a well known florist died July 12. He was born in Montreal, February 17, 1852, and came to this city with his parents when a boy. He has been a partner in the greenhouse and nursery business with his father, John Holder, for the past few years.

ST. LOUIS.—At the St. Louis Exposition, opening Sept. 3 and closing Oct. 20, a feature will be a grand display of fruit, a number of local horticultural societies having concluded to make complete exhibits of fruit from their counties. The

State Hort. society has also taken the matter in hand and will endeavor to secure an exhibit from every prominent fruit grower in the State.

SAN FRANCISCO.—The semi annual meeting of the State Board of Horticulture met July 1. Secretary Lelong in his report devoted considerable space to olive culture. New plantations of olives have been started nearly all over the state. The secretary recommended the laying aside of \$1,000 for the purpose of illustrating new fruits in the biennial reports. Many other matters of general interest were fully discussed.

INDIANAPOLIS, IND.—Spring trade was satisfactory. While schedule of prices was not strictly adhered to, prices obtained were higher than last year and market was steadier. The local association having made arrangements with private citizens planted some twelve beds in one of our city parks. There is a popular desire to have the parks beautified, but the city treasury is in poor shape. Our coming chrysanthemum show will surprise many. Premiums have been doubled in value and there will be many specials.

## Rose Show at the Alexandra Palace.

The first great rose show of the season was held yesterday at the Alexandra Palace, London. Notwithstanding the lateness of the season there was a grand show of blossoms. The exhibitors included the leading professional and amateur rose growers, but the wet day materially limited the attendance of visitors. Messrs. Paul & Son, of Cheshunt, carried off the first prize in the nurserymen's classes for forty-eights and twenty-fours. In the open classes, G. Prince, of Oxford, obtained first prize for twenty-fours and twelves; and Mr. S. P. Budd, of Bath, took firsts for thirty-sixes and twenty-fours in the amateur classes. Perkins & Co., of Coventry, carried off firsts both in table decorations and hand bouquets of roses. Paul & Son were first and C. Turner, Slough, was second for twenty pot roses. The silver cup given by Mr. William Colchester, of Ipswich, for the most meritorious exhibit in the show, was won by Mr. Thomas Ware, of Tottenham, with a magnificent stand of cut and pot flowers. The Wood memorial silver medal for cultural skill was won by the Rev. E. G. King, of Madingley vicarage, Cambridge, with a stand of roses recognized by the judges as the best blooms in the show. Messrs. Harkness Bros., of Bedale, Yorkshire, got second

for twelve roses, both in the nurserymen's and open classes. The show was a distinct advance upon all previous efforts of late years. It is likely next year to be fixed later.—*Pall Mall Gazette* June 28.

## Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1887.

August 1.—Tem. morning 75°, noon 81°, evening 81°. Wind N. to E. Trimmed and cleaned foliage beds. Continued gathering and destroying cut worms.

2—Tem. 72, 86, 80. NW. to SE. Same as yesterday.

3—Tem. 81, 92, 83. E. to S. Same as yesterday.

4—Tem. 79, 88, 83. S to W. Same as yesterday and tied gladioli.

5—Tem. 78, 80, 77. W. to NNW. Continued trimming and cleaning beds.

6—Tem. 72, 77, 72. N. Same as yesterday.

7—Tem. 68, 86, 75. NE. to SE. Sunday.

8—Tem. 70, 85, 75. S. to SE. Removed hollyhocks which had done blooming and replanted with vincas and celosias with coleus and aclyranthes border. Commenced picking pansy seed.

9—Tem. 75, 88, 82. S. Same as yesterday.

10—Tem. 76, 97, 95. SE. to SW. Cleared pansy beds and replanted with celosias and cinerarias.

11—Tem. 72, 80, 75. W. to E. Same as yesterday and lifted and potted chrysanthemums. Tied ricinus and trimmed foliage beds.

12—Tem. 70, 74, 71. NE. Finished potting chrysanthemums and carnations. Commenced taking up tulip bulbs which had been heeled in. Trimmed coleus bed.

13—Tem. 67, 80, 72. NE. Planted young hollyhocks. Continued lifting tulip bulbs, sifted and laid them out to dry. Cleaned canna beds.

14—Tem. 67, 81, 72. S. to SE. Sunday.

15—Tem. 65, 71, 71. N. Commenced repairing houses. Took cut glass from No. 2 and No. 3. Potted primulas from pans. Trimmed and cleaned fancy beds.

WE MUST HAVE THE ROOM, and offer 2000 SMLAX at \$7.50 per 1000. Good strong plants. Also surplus roses best sorts in 4-inch pots. THE FLORAL EXCHANGE, 614 Chestnut Street, PHILADELPHIA, PA.

We still have One Hundred Thousand CELESTY PLANTS, White Plume, Golden Heart, White sold and Boston Market. Strong plants, \$2.00 per 1000. Our circular flow to grow and market the Celery Crop, Free. Cash with order. Rapid transit; through line North and South.

R. W. HARGADINE, Felton, Del.

## PALMS, FERNS, ETC.

All sizes from Seedlings up. Large stock of most useful varieties in best condition at lowest prices.

CHARLES D. BALL, Holmesburg, Philadelphia, Pa.

IT is a conceded fact that there is no better place in the U. S. for Nurserymen to sort up, Dealers to Pack, or Planters to order, than at the Painesville Nurseries, the aim of THE STORRS & HARRISON CO., being to carry a full line of Fruit and Ornamental Trees, Bulbs, Shrubs and Roses. Have a remarkably fine stock of Standard, High Top Dwarf and Dwarf Pear; Plum, Peach, Cherry, Apple, Quince, Russian and other Apricots. Grape Vines, both old and new. Currants, Gooseberries, Blackberries, Raspberries, Strawberries, etc. In fact a full line of Fruits and Ornamentals, both large and small. Prices Reduced to suit the times. Correspondence solicited.



Price List Free. 34th Year. 700 ACRES. 24 GREENHOUSES. Address THE STORRS & HARRISON CO., PAINESVILLE, LAKE CO., OHIO.



## The Florists' Clubs.

In view of the fact that the Cleveland and Rochester clubs are almost on the verge of dissolution we wish to say a few words in regard to the value of these local organizations and the methods which should be adopted to bring out their full value.

There are always some people who can never see any value in anything that does not put something so directly into their pocket that they can see the hand which does it. This may be illustrated by the remark of a grower for the Chicago market. He said: "That exhibition undoubtedly benefited these down town florists by increasing the demand for cut flowers, but it didn't benefit me in any way." His mind didn't reach even far enough to see that if the retailers' sales were increased more must be brought from the grower. This class of people must be either educated or killed off. First try education, and if that fails try the other course, it is a sure cure.

We do not believe that any man with half a brain will deny that great good results from organization; the discussion of the details of our business (which will bear unlimited discussion with benefit); the reading of practical papers for the purpose of bringing out such discussions and the intimate acquaintance which follows frequent meetings. Florists are very prone to under-rate the ability and goodness of heart of their competitors. You can't expect to know their good qualities until you become acquainted with them. Meet them frequently, associate with them, get acquainted with them and find out what good fellows they are.

How can this be accomplished better than through the florists' clubs, meeting as often as once a month? But don't expect the club to run itself. Work and considerable of it must be done by some one, and don't forget that the worker will be most quickly benefitted. One thing suggests another. Once get the ice broken and things will go with a rush. Sometimes organizations run down through the inattention of the officers to their duties. A man who accepts an office and then neglects it when the life of the organization is endangered by such neglect is a poor specimen of a man and should be summarily removed. Better lose a member than to lose all. No society can flourish unless its officers take an active interest in its welfare. Therefore look well to the men you honor by placing them in office. But don't let your club go to pieces just because you may have poor material in office now. Wait and be wiser next time.

## Hiram Sibley.

This well known seedsman died July 12 at his home in Rochester, N. Y., from a stroke of apoplexy at the advanced age of 81 years.

Mr. Sibley was born at North Adams, Mass., February 6, 1807. He acquired a national reputation through the construction of the overland telegraph, connecting the Atlantic and Pacific by wire. He was the first president of the Western Union Telegraph Co., which office he held for sixteen years.

His seed business was commenced in Rochester in 1858. He had several large seed farms, one of 3,500 acres in Cayuga county, N. Y., and another containing originally 40,000 acres, in Illinois. He owned also a large number of smaller farms in New York and Michigan.

# HENDERSON'S PANSIES FOR FALL SOWING



We offer for delivery in August, or as soon as our new crops are received, Pansy seed of more than usual excellence in color, size, selection and variety; our contracts having been placed with celebrated specialists in Scotland, England, France and Germany. Our annual exhaustive trials of hundreds of varieties and strains, and the large quantity of Pansy plants we grow for a critical trade, enables us to select probably better than any other house, really high class strains, and the immense yearly increase in our sales show that our customers appreciate our efforts in this direction.

## IN COMPARING PRICES REMEMBER THAT ONE OUNCE OF PANSY CONTAINS 30,000 SEEDS.

Henderson's Fancy, mixed. (Belgian.)	Per oz.	PANSY. In separate colors.	Per oz.
For rich and varied colors no strain in existence can surpass this.	\$ 6.00	Emperor William, ultra marine blue.	\$ 1.25
<b>Henderson's Highland, mixed. (Scottish.)</b>		Faust, or King of Blacks.	1.00
This without exception is one of the finest strains of pansy in the world—the flowers being of the largest size, perfect in form, and of a great variety of beautiful colors.	1-8 oz. \$3.00 22.00	White Treasures.	1.00
Premier, mixed, (French), per 1-8 oz.	\$3.00 22.00	Yellow.	1.00
Giant Trinardeau, mixed, probably the largest flowers grown.	6.00	Snow Queen, satiny white, no eye.	1.00
Odier, or Eve blotched; mixed.	6.00	Striped.	1.00
English Show, mixed, a splendid strain.	4.00	Maogany.	1.00
German, finest mixed.	2.00	Delicate, porcelain, blue and white.	1.25
Good mixed.	per lb. \$8.00 .75	Fire Dragon.	2.50
		Rex, deep velvety purple.	2.00
		Bronzed edged rose.	1.25
		Rose marbled.	1.25
		Bronze.	1.25
		Azure Blue.	1.00
		Lord Beaconsfield, violet shading to white.	1.50
		Gold margined.	1.00

The new Fancy Pansy seed produced a bed of Pansies so beautiful that it attracted the attention of many passers by, and I had many inquiries of where the seed could be obtained. DR. WM T. CLARK, HOUSTON, TEXAS.—I get finer and larger flowers from the plants raised from your Fancy Pansy seed than all others.

LITTLE FALLS, N. Y.—We received the new Fancy Pansy last year, and had the finest ever grown in this section. MAGILL BROS., Florists.

FARMINGDALE, N. Y.—The Pansies I got from you last Spring were magnificent. E. W. WINSOR.

NEWARK, N. Y.—Our Pansies and Primulas, got from you last Spring were superb; the Primulas, the best we ever had. LEVI A. LOVELAND, Florist.

## PETER HENDERSON &amp; CO.,

35 and 37 Cortlandt Street, NEW YORK.

Our Florist's Catalogue of other flower seeds for Fall sowing will be sent on application. Our Bulb Catalogue will be ready for the trade about Aug. 15th, and our retail about Sept. 1st.

## FOR SALE

IN DORCHESTER, SIX MILES FROM BOSTON, THE WELL-KNOWN ROSE GROWING ESTABLISHMENT OF MINTON BROS.

The es'ate contains 35,000 feet of land, on which are two rose houses each 100x20, one 100x15 and one 116x18. Two of these houses are comparatively new and all are well stocked with plants. Heated by hot water, two of the boilers new last fall and all in first-class condition. The houses are supplied with city water, and are located on one of the principal streets, convenient to railroad and horse cars, and land is fast appreciating in value. There are also 200 hotbed sash. Price, \$9,000. Sickness only reason for selling. Apply to

WM. J. STEWART, 67 Bromfield St., Boston, Mass.

## LAURUS CAMPHORUS

We offer a fine stock of the true Camphor Tree—the most beautiful hardy Evergreen for the South—well adapted for SHADE TREES in street planting. In a sanitary view, the best substitute for the more tender Cal. Blue Gums (Eucalyptus Globulus).

1 year old plants, each \$1.00; 2 year old, each \$1.50

## MAITRE &amp; COOK,

140 CANAL ST., NEW ORLEANS, LA.

300 STORM KING AND PHENOMINAL

## EUCALYPTUS.

in 4-inch pots; fine stock in full bloom, at \$5.00 per 100

## CHARLES F. SEITZER,

84 State street, UTICA, N. Y.

## GOOD STOCK FOR FLORISTS.

ROSES—	Per 100 Per 1000
Saturno, Margaret, Bride, Bon Silence,	
Mad. Alex. Bernaix, la Pactole, and	
thirty other good varieties.	\$ 4.00 \$30.00
Bouvardia, Leontide, fine, 5-in. pots.	5.00 50.00
Honeyuckles, Hales, and	
Reticulata.	2.00
Echeveria securigland, fine, 5-in. pots.	3.00
Begonia Rubrella and Semp. Gig. Rosea	7.00
Pastifloras, Constance Elliott, Fordill,	
Smithii, Trifascia.	3.00

List mailed on application.

Address GEO. THOMPSON &amp; SONS, LOUISVILLE, KY



## Philadelphia.

A nine of "Growers" composed of employes of Craig & Bro., and one of "Florists" selected from the local retail florist stores engaged in an intensely interesting combat on the diamond July 13. The following vivid account is taken from a Philadelphia daily:

The florists were entered in battle array against the growers. The flower men have not had so much excitement in many moons, and the spectators said after the game that they never had more fun in their lives.

These were the opposing teams: Growers—Walker, ss; Craig, lf; Hunter, c; McConnell, p; Brown, lf; Heatherington, 2b; Hunter, 3b; McDonald, cf; Myers, rf; Florists—Dunning, p; Graham, cf; Pach, c; Crawford, ss; Covert, 3b; Hunter, lf; McLean, 2b; Kift, rf; Dick, lf.

The costumes worn by the players were gay and diversified. Two or three had regular costumes, but the majority had evidently allowed their taste to run fancy free in the selection of startling garments. Mr. McLean was gaudily attired in a pair of bathing trunks, being determined that his manly proportions should be fully appreciated by the audience. When the players came on the field they were greeted with groans and jeers by their fellow florists on the alleged grandstand and many were the merry jokes and facetious sallies indulged in. Several designing enemies of Mr. Cenpad, formerly of the Athletics, succeeded in having him appointed umpire. His expression as he came on the grounds was one of care and evil foreboding of the future. The players gazed at him balefully, but appeared somewhat concerned when he produced from one pocket a blackjack and a bowie knife, and from another a \$3 calibre Smith & Wesson. These preparations seemed full of ill omen for recalcitrant ball tossers. An ambulance under the charge of a staff of surgeons and well supplied with medical appliances was in attendance.

The Florists had the first inning. Dunning went first to the bat and opened the ball by scoring. Then the Florists hollered in a way that made the welkin get up and hump himself. Graham gracefully fanned the incorporeal air, and Pach banged to left field, one of Growers allowing Dunning to score. Crawford walloped the wind with great vehemence and retired. Covert hitting to short and dying very ingloriously at the first base.

The next Florist wanted to get through early and cut across from first to third, displaying great indignation on being declared out. When the Growers came in it was found necessary to provide one of Craig's barrows for McLean, as he insisted on being wheeled around the bases.

In the middle of the second inning one of the Growers scored, and arriving home asked where his beer was. He had come out to play under the impression that every scorer would receive a glass of beer. On having his mind disabused of this impression he wanted to resign.

The catcher of the Florists wore the wire frame of a funeral design for a mask. Several of the Growers made their catches with ten-inch flower pots, and their catcher's mask was filled with some of Harris' finest water lilies. In the fourth inning a Florist banged the ball over the fence and the game had to be suspended while a committee went in search of it. The sensation of the game was caused by John Dick gathering in a hot liner. He was so surprised he fainted, and he had to be fanned with the red bandana he had been wearing around his head. His friends will present him with an engrossed set of resolutions in commemoration of the event.

The score finally stood: Growers 23, Florists 16; but it is understood that an appeal is to be taken, and another game will be played if the players recover from their injuries.

## DREER'S OFFER OF PLANTS FOR AUGUST.

Pieris Tremula, 2 1/2 in. pots.	per 100 per 1000	\$8.00	\$80.00
Demostedtia Duvall-Hofeide, a most useful fern, like P. Tremula. It is a strong grower and useful for cutting or decorative purposes, 2 1/2 in. pots.	6.00	50.00	
Alphalpa Australis. A large stock of this most useful fern for indoor ferns. Strong plants, 3 inch pots.	8.00	70.00	
Rosea Papa Gentier. First class stock in best possible condition for immediate planting, 3 inch pots.	8.00	70.00	
4 inch pots.	12.00	110.00	
5 inch pots.	15.00	140.00	

Dreer's Mid-Summer Trade List offers the best stock to florists; sent to all applicants.

HENRY A. DREER, Philadelphia.

Mention American Florist.

I have a limited quantity of

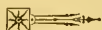
**HOLLYHOCK SEED** from my own unsurpassed collection. Per package of 100 seeds 25 cts., mailed free to any address.

GEO. CLASSMAN, Horticulturist.  
SING SING, N. Y.

## WE ARE NOW BOOKING ORDERS FOR HYACINTHS, TULIPS, Single and Double NARCISSUS, Etc. SEEDSMEN AND FLORISTS

Importing direct should write us for prices. Special rates to large buyers. Largest stock of

*Hyacinths, Tulips, Polyanthus, Single and Double Narcissus, Narcissus Bicolor Horsfieldi, Poets Ornatus, Trumpet Major, Double Von Sion.*



R. VAN DER SCHOOT & SON.

Bulb Growers,

HILLEGOM, near Haarlem, HOLLAND.

## POLMAN MOOY, HAARLEM, HOLLAND. WHOLESALE GROWERS OF DUTCH BULBS.

TRADE MARK.

SEE OUR GENERAL LIST FOR NOVELTIES AND SPECIALTIES.

HEADQUARTERS FOR FORCING BULBS.

ESTABLISHED IN 1810.

## C. H. JOOSTEN, 3 Coenties Slip, NEW YORK, IMPORTER OF DUTCH BULBS

From P. VAN WAVEREN Jr. & CO., Hillegom, Holland.

ROSES AND ORNAMENTAL TREES AND SHRUBS

FROM THE BOOSKOOP HOLLAND NURSERY ASSOCIATION.

Roman Hyacinths, Paper White Narcissus, Freesias, Lilium Candidum and Harrisii, Azalea Indica, etc. SEND FOR CATALOGUES.

## BULBS WE ARE LARGE IMPORTERS OF FORCING BULBS. SEND YOUR LIST FOR PRICES. CURRIE BROS., SEEDSMEN AND FLORISTS. MILWAUKEE, WIS.

## E. H. KRELAGE & SON, The King's Nurserymen and Seedsmen, HAARLEM, HOLLAND.

## DUTCH BULBS. Newest Wholesale Trade List (No. 401a) now ready. Sent the trade prepaid on application.

PRICES MUCH REDUCED, AND VERY CHEAP. Enormous stock of first quality and complete collections of Bulbs of every description. NO AGENTS. Please address direct. This catalogue contains two first offers of UNRIVALED COLLECTIONS of fine late Tulips for amateurs, and late ONE-COLORED BREEDERS, never before offered, as well as of STRAWBERRIES. Shortly issued: A new edition of the catalogue of COLORED PLATES of Plants, Flowers, Fruits, etc. (No. 395), containing more than 1200 names and prices of plates of all sorts, principally of Bulbous and Tuberous-Rooted Plants. This Catalogue too will be supplied free on application.

## CHOICE PLANTS.

We offer in prime quality for Aug. delivery.

Glenador, Double White, 4 inch	per 100	\$2.00
Pasiflora princeps, strong, 4 inch	1.00	
Gloxinia in buds, extra fine	2.00	
Allamanda grandiflora 4 inch pots	1.00	
Tree Mignonette L'aroma alba, 3 inch	2.00	
Bouvardia, Double Yellow, 3 inch	2.00	
Meiblenia hypericifolia, fine, 4 inch	2.00	
Penista carniensis, very free blooming, 4 inch	2.00	
Myrica communis (Bridal Myrtle), 4 inch	2.00	

Per 100

Smilax, 2 inch pots

Pomegranate Lagrella d. pl. yellow striped red

Oleander, single white and double pink

Marechal Niel, 2 inch pots

Cloire de Dijon, 2 inch pots

Lamirap, 2 inch pots

10,000 Roses assorted best sorts. Send list for prices from 2 1/2, 3 or 4 inch pots. Illustrated Catalogue of 100 pages mailed Free to all applicants.

Address **NANZ & NEUNER,**

LOUISVILLE, KY.

Contracts made now for Fall Delivery 1888

Japanese Lily Bulbs California Lily Bulbs

Japanese Seeds, Conifers, Palms

Trees, Shrubs, and Bamboos.

H. H. BERGER & CO., 315 & 317 Washington Street,

SAN FRANCISCO, CALIFORNIA.

Send for Estimates. Established 1878.

HIGLEY'S TRADE LIST OF

SEEDS, PLANTS, BULBS

AND FLORISTS' REQUISITES

Now out. If you do not receive one, send for it. Address

HENRY G. HIGLEY,

CEDAR RAPIDS, IA.

Mention American Florist.

**AUGUST RÖLKER & SONS,**

44 Dey St., NEW YORK,

Supply the Trade with

**SEEDS, BULBS,**

And all kinds of

**FLORISTS' SUPPLIES.**

Price List mailed on application.

**Bulbs, Immortelles, Etc.**

SPECIAL PRICES ON LARGE QUANTITIES.

**J. A. DE VEER,**

(Formerly of DeVeer &amp; Boomkamp.)

183 Water St., New York.

SOLE AGENT FOR

THE GENERAL BULB CO., Vogelenzang, (Holland.)  
Ls. BREMOND FILS, Ollioules, (France.)

Full Catalogues now ready. Free to applicants in the trade.

**FORCING BULBS.**ROMANS AND DUTCH HYACINTHS,  
NARCISSUS, LILUM HARRISII  
AND CANDIDUM, TULIPS,  
AND FREESIAS, ETC.

Send for prices by the 100 or 1000. Special list will be ready in August.

A. GIDDINGS, DANVILLE, ILL.

**C. H. ALLEN,**

(Successor to C. L. ALLEN &amp; CO.)

**BULB GROWER**

TO THE TRADE ONLY,

JAMESPORT, N. Y.

Catalogues ready in August.

Office during Convention, 36 E. 23rd st., N. Y.

**SMILAX.**2000 Strong Plants from 2½-inch pots,  
\$2.00 per hundred.**HENRY HARMS,**

NILES CENTER, COOK CO., ILL.

**HIGH GRADE PANSIES  
A SPECIALTY.**

After a thorough trial of the most noted strains of Pansies in cultivation, we confidently recommend the following to the trade as a long way ahead of all others, for size or colors:

Our Improved Giant Trimardesau as the best for market. Package of 150 seeds, \$1.10.  
And New French Fancies as Extra. Package of 400 seeds, \$1.00.**DENYS ZIRNCIEBEL,**

Needham, Mass.

(NEW CROP SEED AFTER JULY 1st)



KILLS

INSECTS

FISHKILL-

ON-

HUDSON, N. Y.

**BERMUDA EASTER LILY****(L. HARRISII.)**

WE HAVE A VERY FINE LOT OF THE ABOVE LILY.

5 to 7 inches in Circumference @ \$6.50 per 100, \$60.00 per 1000.

7 to 9 inches in Circumference @ \$10.00 per 100, \$95.00 per 1000.

Free on board cars in New York.

—ORDER EARLY.—

**V. H. HALLOCK & SON,**  
QUEENS, NEW YORK.**F. E. McALLISTER,**

—WHOLESALE DEALER IN—

Seeds For the Florist Market, Garden-er and Farmer. Requisites Such as Baskets, Im-mortelles, Grasses, Mosses, Boquet Pa-pers, Pampas Plumes, etc. Bulbs For the Green-house or Gar-den.

22 Dey Street, - - - NEW YORK.

**SEGERS BROTHERS,**  
GROWERS OF  
**HOLLAND BULBS.**

OUR SPECIALTIES ARE.

Holland Hyacinths and Tulips, in any quantity; also Crocuses,  
Narcissus, Daffodils, Liliums, Lily of the Valley, Gladiolus  
The Bride, Anemones, Ranunculus, Spiræa Japonica, etc.

References as to quality of our Bulbs, etc., to several United States Florists and Seedsmen.

Our Wholesale Catalogue is now Published.

PLEASE DO NOT DELAY TO SEND YOUR ORDER.

**LISSE. NEAR HAARLEM, HOLLAND.**

WHOLESALE ONLY.

NO AGENTS.

SEND FOR SPECIAL LIST OF  
**FALL BULBS.**

Roman Hyacinths ready about Aug. 20.

ORDERS TAKEN NOW FOR ROMAN HYACINTHS, LILY CANDI-DUM, LILY HARRISII, AND ALL FORCING BULBS.

ALSO FOR THE FULL LINE OF DUTCH BULBS.

**JAMES KING,**

170 Lake St. CHICAGO.

**DUTCH HYACINTHS.**

Our Wholesale Catalogue for the coming season of

**DUTCH HYACINTHS, TULIPS, NARCISSUS,  
AND ALL OTHER BULBS AND BULBOUS ROOTS**

Is now ready. Don't forget to forward a postal card if you want one, as there is a great reduction in prices of

Hyacinths, Narcissus, Gladiolus, and other worth-growing Bulbs and Roots.

**SEGERS & CO.,**

BULB GROWERS,

**LISSE, near HAARLEM, (Holland.)**



## Dirty Houses.

The slovenly housekeeper sweeps her dirt up behind the door, and the ditto florist throws his under the bench. A look under the benches in the green-houses of some florists reveals the most remarkable collection of rubbish that can be imagined. When he has energy enough to clean diseased foliage from the plants, he throws it under the bench where the fungus may ripen its spores and spread itself. An untidy man will never make a successful florist for cleanliness is one of the essentials of success.

OUR ANNUAL Convention Supplement will be mailed with next issue. It will contain a map of a portion of New York city, showing convention hall, exhibition hall, hotels at which rates have been secured, the programme of the meeting and much other matter of interest to those in attendance.

**PELAGORIUM "SWANLEY WHITE."**—A colored plate of this new zonal pelagorium appears in *The Garden* for July 7. As represented in the plate it is certainly a beautiful flower, the color a clear white, flowers single in a superb truss. The plant is described as of robust habit.

**COWBES.**—When you start to enter a greenhouse and find cowbes across the path it don't take a keen person very long to conclude that the house hasn't been visited very many times that day. Don't look for thrifty, paying stock in that house for you won't find it there.

A BENCH which is required to be temporarily eighteen inches nearer the glass every spring, is raised to the required height when desired, by a Chicago florist, by placing low wooden horses in the old bench and laying a new one on top of the horses.

## WANTED.

FOR WINTER BLOOMING.

100 Bonardia President Garfield, 20 Alfred Neuner, 101 Bride 100 Davidson. With full particulars and price address

ALBERT BURT, SYRACUSE, N. Y.

## FREESIAS—GUERNSEY—FREESIAS

ONE OF THE OLDEST STOCKS IN EUROPE.

No *Freesia* *Guernsey* *Guernsey*.

Buyers should avoid being supplied from stocks recently received from the Cape. To Florists they are a sure loss.

Our Bulbs start growth all together, and these, with size is the sure test of quality in *Freessias*.

CHAS. SMITH & SON,  
NURSERYMEN,  
GUERNSEY, ENGLAND.

Mention American Florist.

## PANSIES.

NEW GIFT SEED JUST ARRIVED

FROM THE GROWERS.

I would call the attention of the trade to the following splendid varieties of Pansies which I have had grown especially for my own home trade by the best French and German growers:

"NEW IMPROVED GIANT TRIMARDEAU"

NEW "HUGNOT'S" FANCY, especially improved which for beauty of form, good substance, variety of markings, richness of color and enormous size cannot be excelled by any one. These are the very best varieties for market purposes ever grown.

"New Gift Seed" put up in trade packets containing 500 seeds each.

Trimardeau, 50c., Hugnot, 75c. each.  
Printed directions for sowing, in English and German.

FRED SCHNEIDER,

ATTICA, WYOMING CO., N. Y.

Mention American Florist.

## ROEMER'S SUPERB PRIZE PANSIES.

The Finest Strain of Pansies in the World. *Introducer and Grower of all the leading Novelties.*

Catalogue free on application.

FRED. ROEMER, SEED GROWER.  
QUEDLINBURG, GERMANY.

THE BEST AND CHEAPEST  
DOUBLE PETUNIA SEED

(P. hybrida grandiflora fl. pl.)

In the market. For sale to the trade by the grower.

G. A. McTAVISH,  
NORTH SAANICH, B. C., CANADA.

## LAING'S BEGONIAS.

AWARDED FOUR GOLD MEDALS

A Great  A Great  
Specialty. *LAING'S BEGONIAS* Specialty.

## JOHN LAING &amp; SONS

Cordially invite all Americans and Canadian friends visiting London during the summer months to come and see their grand collection of Single and Double

## BEGONIAS

Which for quality and quantity are unapproached by any other collection. Our fields and houses during the summer and autumn will be a sight never to be forgotten.

DO NOT FAIL TO SEE THIS GRAND FLORAL DISPLAY

Best route to reach our Nurseries is from Charing Cross (Common Street, or London Bridge (3 minutes ride) to Cardiff Bridge Station, thence a walk of 5 minutes. DESCRIPTIVE CATALOGUES POST FREE.

## JOHN LAING &amp; SONS,

Seed, Plant and Bulb Merchants,  
FOREST HILL, LONDON, ENGLAND.

Registered Telegraphic Address—Caladium. London.

## 5,000 CAPE JASMINE,

(JARDENIA FLORIDA.)

Well grown plants from nursery, clean and free from insects, many of them in bloom now.

ORDERS BOOKED NOW FOR FALL DELIVERY.

Will be sure to please you. Price, \$8.00 per 100; \$75.00 per 1000. Just what you want to catalogue.

GOOD &amp; REESE,

SPRINGFIELD, O.

## SMILAX PLANTS.

Extra strong, grown in 2-inch pots, cut back to make bushy, at \$4.00 per 100, or \$35.00 per 1000.

Address AT ONCE.

PAUL BUTZ &amp; SON, New Castle, Pa.

## THE ILLUSTRATED

## Dictionary of Gardening

A Practical and Scientific Encyclopædia  
of Horticulture for Gardeners  
and Florists.

EDITED BY GEO. NICHOLSON,

of the Royal Botanic Gardens, Kew, England.

A most valuable work of reference for florists  
and all interested in horticulture.

PRICE, for the set of seven handsomely bound  
volumes, \$21.00.

JAMES A. PENMAN,

12 Dey Street, NEW YORK.

Sole Agent for the United States and Canada.

Orders may also be addressed to the

AMERICAN FLORIST CO.,

54 La Salle Street, CHICAGO.

## FORCING BULBS

FOR

Fall Delivery.

## NARCISSUS

AND OTHER

## FORCING BULBS

For Fall Delivery

All Good Flowering Bulbs.

OF NARCISSUS I SHALL HAVE ABOUT  
TWO MILLIONS READY FOR  
FALL DELIVERY.

Narcissus Albicans, the best of the single white

trumpets.

Narcissus Bicolor Empress, the queen of the bi-

color daffodils, enormous flowers.

Narcissus Bicolor Grandis, similar in color to

Horsfield, but having larger flowers and

blooming later.

Narcissus Bicolor Horsfield, one of the largest

and best for cutting.

Narcissus Bulbocodium, the Hoop Petticoat daf-

fodil; very fine, strong bulbs.

Narcissus Bulbocodium Citrinus, like the yellow

Hoop Petticoat, but with pale sulphur-yellow

flowers.

Narcissus Golden Spur, very large deep yellow

flowers and early blooming; one of the best.

Narcissus Henry Irving, one of the best deep

golden yellow trumpets.

Narcissus Incomparabilis Cynosure, a beautiful

single Incomparabilis for cutting, yellow cup,

divisions creamy white.

Narcissus Incomparabilis Stella, large single

white variety, very early, fine for cutting.

Narcissus Major, true, one of the best forcing

sorts, large yellow trumpet, similar to maxi-

mus.

Narcissus Nobilis, a first-class variety for florists,

free and early.

Narcissus Obvallaris, the true Tenley daffodil, one

of the best varieties, forcing deep rich yellow

flowers of great substance.

Narcissus Odonus Campanelle, the well-known

Campanelle jonquil, very strong bulbs.

Narcissus Orange Phoenix, large double white

flowers with orange center, good for cutting.

Narcissus Pallidus Præcox, the earliest of all;

forces very freely; single sulphur-colored

trumpets.

Narcissus Poeticus Ornatus, the early white poet's

Narcissus, the best of the Poeticus section for

forcing and for cutting.

Narcissus Poeticus Plenus, the double white Nar-

cissus.

Narcissus Princeps, one of the best forcing sorts;

soft pale yellow trumpets.

Narcissus Rugilobus, true, large yellow trumpet,

very free and very early.

Narcissus Scoticus, the Scotch Garland daffodil, a

beautiful variety both for borders and for

forcing.

Narcissus Von Sion, true, the double deep yellow

daffodil.

And many other first-class sorts. List of

varieties and price I should be happy to fur-

nish on application.

Anemone Fulgens, true, fine strong English grown

tubers.

Chionodoxa Lucilia, true, beautiful blue flowers in

early spring.

Freesia Relracla Alba, one of the best modern

plants for forcing, pure white, sweetly scented

flowers.

I shall be happy to post prices of any

of the above upon application.

THOS. S. WARE,

HALE FARM NURSERIES,

Tottenham, London, England.

# SURPLUS STOCK.

## 25,000 MUSA ENSETE,

The Great Abyssinian Banana, Best Decorative Plant for the Lawn.

## 100,000 ROSES

PERLES, NIPHETOS, BRIDES, CATHERINE MERMET, PURITANS, LA FRANCE, Mad. CUSIN, Etc.

## HARDY PLANTS OF ALL VARIETIES.

Prices extremely low can be had on application.

**B. A. ELLIOTT CO.,**

**PITTSBURG, PA.**

### FALL CATALOGUES WELL PRINTED.

AND any other Catalogues you want, any time. No better work anywhere—not much as good. We print with good type and presses; plenty of live cuts, and use BRAINS trained to work accurately for Nurserymen, Florists and Seedsmen—this last item is sometimes scarce, to judge by many catalogues! Write for samples and prices. Not only Catalogues—Trade Lists, Circulars, Stationery, etc.; anything BUT seed-bags, litho. colored plates and printed wooden labels. Write freely, but specifically.

**J. HORACE MCFARLAND, Harrisburg, Pa.**

## FLORISTS AND OTHERS

Attending the Florists' Convention in New York are cordially invited to visit our Seed Warehouses, 35 and 37 Cortlandt St., New York, and our Greenhouses and Grounds, located on Ocean and Arlington Aves., Jersey City N. J.

The Greenhouses can be reached by ferry and horse cars from our office in Cortlandt Street in 40 minutes.

**PETER HENDERSON & Co.**

### THE SYRACUSE NURSERIES, OLD AND RELIABLE.

Are still offering the most complete assortment of young, smooth, thrifty Stock in America.

BUDDED APPLES, STANDARD PEARS, DWARF PEARS (High and Low Heated PLUMS, CHERRIES, PEACHES, QUINCES, RUSSIAN AFRICOTS, GOOSE-BERRIES, CURRANTS, and a full line of

Ornamental Trees, Shrubs, Etc. Also Extra Sized Standard Pears of the Finest Quality.

Special Inducements to Buyers in large quantities. Trade List out August 1st.

**SMITHS, POWELL & LAMB, Syracuse, N. Y.**

## THE AMERICAN FLORIST

— WILL PUBLISH A —

## CONVENTION SUPPLEMENT

To be mailed with the next issue, preceding the meeting. It will contain a MAP of a section of New York City, showing the location of the Convention and Exhibition Halls, Hotels at which special rates have been secured, Railroad Depots, etc. Also the programme of the meeting, in addition to many other notes of interest to those attending the convention.

Space will also be allotted to cards of those who are exhibiting at the meeting and wish to call SPECIAL ATTENTION to their exhibits, for which purpose the SUPPLEMENT will afford UNEQUALED FACILITIES, as it will be in the hands of each Delegate BEFORE the meeting and in connection with other reference matter of value at the time.

Rates for advertisements in the SUPPLEMENT will be the same as in the body of the paper. Copy for this SUPPLEMENT should REACH US by August 8 at latest, earlier will be better. Address

**AMERICAN FLORIST CO.**

**54 La Salle Street, CHICAGO.**



Smilax, fire plants.....	Per 100
Asparagus Tenuesimus.....	\$ 3.00
Pelargonium Fries Dornier.....	3.00
3-in. pots \$10 10, 4-in. pots 15 00	
Calla Ethiopica, 2 1/2 & 3-in.....	4.00
" " 4-in.....	12.50
" " 5-in.....	4.00
" " 6-in.....	6.00
Hydrangea Thos. Hogg & Hortensis, 2 1/2-in.....	6.00
Hydrangea Thos. Hogg & Hortensis, 4-in.....	10.00
Gardenia Radicans, 3-in.....	6.00
Florida 2 1/2-in.....	5.00
Echeveria Secunda Glauca 3-in.....	4.00
Oleanders, white, 2 1/2 to 3 ft.....	15.00
Perennial Phlox, good assortment, 4-in pots.....	10.00
Roses, Bon Silene & Mermet, 4-in. pots, strong.....	12.00

**MICHEL PLANT AND SEED CO.,**  
718 Olive St., ST. LOUIS, MO.

## 5,000 SMILAX.

Strong, healthy plants in 3-in. pots,

\$4.00 per 100, \$35.00 per 1000.

**BRENNEMAN & PETTERSON,**

Harrisburg, Pa.

× × × × × × × × × ×

## WESTERN FLORISTS

I OFFER NOW

## SMILAX

Nice, thrifty plants.....	Per 100
Geraniums, Asa Gray, 4-in. in bud and bloom..	only \$2.50
" " " 3-in.....	3.50
" " Gen. Grant, 3-in. ".....	3.50
Hibiscus, 2 1/2-in, 5 var.....	5.00

Address **N. S. GRIFFITH,**

**JACKSON CO. INDEPENDENCE, MO.**  
(Independence is well located for shipping, being 8 miles east of Kansas City.)

× × × × × × × × × ×

## SMILAX.

WANTED—YOUR TRADE.

Fine young plants ready now, from No. 3 rose pots.

ORDERS BOOKED for Delivery either in July, August or September.

Send for low prices and shipping particulars. Can send by fast freight or express.

## PANSIES.

Will have a fine assortment for planting frames in the fall or forcing. Send for particulars.

**ALBERT M. HERR,**

Lock Box 338. LANCASTER, PA



## New York.

Alexander McConnell is at Bar Harbor, Maine.

Mr. John Henderson highly esteems the Gloire de Margottin rose.

Fine specimens of Papa Gontier roses are now sent from John Henderson's.

"Comanche George" has turned up again in these parts, offering seeds of another tropical humbug.

A large fire in Tripler Hall, adjoining Alex McConnell's store, caused considerable hustling there on the 14th inst., but no damage.

Mr. Alfred Henderson was taken severely sick at the West when going to the seedsman's convention. He is now convalescing at Bayside, Long Island.

Odontoglossums are at present used more freely than orchids in the new rose and orchid bouquet. Siebrecht & Wadley make this design in perfection, naturally, as they have the stock to do it with.

The entire stock of Mrs. Hardy chrysanthemum is owned by James K. Pitcher of Short Hills, New Jersey. From his 150 plants he has propagated 5,000 plants which will be offered February 1, 1889. He is preparing to exhibit Mrs. Hardy at the fall chrysanthemum show, having several plants in 6-inch pots under cultivation for that purpose. Mr. Pitcher is putting up a large lot of glass on his place and it is rumored that he and Mr. Maunda will go into partnership as commercial growers. F. A. B.

## The Louisville Floral Exhibition.

Louisville, Ky. intends to have a grand floral jubilee September 10-22, which it is claimed will eclipse any previous effort of the kind. It will be in connection with a celebration, features of which will be industrial, military and civic parades, procession of flora, etc., modeled somewhat on the plan of the well-known Mardi Gras in New Orleans.

Any one wishing to make a display of floral designs, cut flowers, immortelles or plants may correspond with A. A. Neuner, president of the local society. Valuable premiums are offered. In addition there will be a fine exhibition of fruits, for which liberal premiums will also be offered.

## Good Sized Plants.

A Begonia metallica six feet in height, three feet through, well furnished with foliage down to the pot, and a Black Prince fuchsia seven feet in height, four feet through at thickest part, symmetrical in form and a mass of bloom, are two plants of which Mrs. R. G. Young, Michigan City, Ind., is very proud as representing what a lady florist can grow, when she puts her mind to it.

## ROSES, SEEDS, ETC.

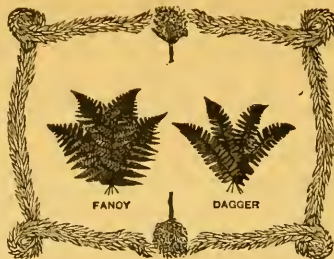
PERLES, 3-inch, \$7 per 100; 2-inch	Per 100	\$4.00
JACOS, 4-inch, \$10 " 3-inch		6.00
" 2-inch		4.00
FUCHSIA Storm King, 2-inch		4.00
" Phenomenal, 4-inch		8.00
" " 2-inch		5.00
BEGONIA Louis Chretien		6.00
" Rex		4.00

## SEEDS.

PRIMULA SINENSIS Rubra, 100 Seeds, 15 cents.	
" Alba, " 15 "	
SMILAX, New Crop	per oz. \$1.00

J. E. BONSALE.

308 GARFIELD AVE., SALEM, O.



ED. JANSEN,

Importer &amp; Manufacturer

— OF —

NOVELTIES IN BASKETS.

124 W. 19th Street,

Bet. 6th &amp; 7th Aves.,

NEW YORK.

A FULL LINE OF  
Florists' Supplies

WILL BE ON EXHIBITION

— AT —

NILSSON HALL

DURING THE

CONVENTION AT NEW YORK,

— BY —

H. BAYERSDORFER,

OF

M. M. BAYERSDORFER &amp; Co.

56 N. 4th St., PHILADELPHIA.

Don't Fail to Examine this Exhibit.

TRY DREER'S  
GARDEN SEEDSPlants, Bulbs, and  
Requisites. They are the  
best at the lowest prices.  
TRADE LIST issued  
quarterly mailed free.HENRY A. DREER,  
Philadelphia.

## APPLE GERANIUM SEED.

Per 100 40c.; per 1000 \$3.00; per 10,000 \$25.00.  
Orders filled while stock lasts. First come, first served. AddressBROTHERS' INDUSTRIAL GARDENS,  
MOBILE, ALA.CUT SMILAX TO THE TRADE.  
FINE LOT.

ALSO QUITE A LOT OF FREESIA BULBS.

Would like to sell in one lot, low. Will send dealer  
make proposition. Cash.

C. THOMPSON ADAMS, West Medway, Mass.

Delegates to the next  
convention will travel  
via the

MONON ROUTE

THE  
Pullman Car LineTO AND FROM  
Louisville, Indianapolis, Cincinnati and the winter  
resorts of Florida and the South. For full information  
address

E. O. McCormick, Gen. Passenger Ag't, Chicago.

## CUT FERNS.

NEW CROP 1888.

NOW READY. Used for Bouquet Work, filling  
Flower Baskets, Decorating Altars, &c., &c.,  
and are preferred by many to smilax.

\$1.50 per thousand Ferns.

BOUQUET GREEN. \$2.00 per bbl. (30 lbs.)  
or \$5.00 per 100 lbs. Season commences Oct. 1st  
for holiday trade.SPHAGNUM MOSS—Long  
clean fibre, dry or green, \$1.00 per  
bbl. or six bbls. for \$5.00. Sample  
or trial sacks containing 3 bushels  
of Moss, dry, very light, designed  
for express shipments, \$1.00 per  
sack.

L. B. BRAGUE, Hinsdale, Mass.

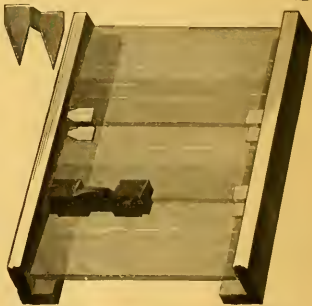
Mention American Florist.

THE EVANS CHALLENGE  
VENTILATING APPARATUS.WITHOUT A RIVAL EITHER IN  
COST, SPEED IN OPERATING OR  
SECURITY IN CASE OF STORMS.— MANUFACTURED BY —  
QUAKER CITY MACHINE CO.,  
1108 and 1110 North E Street,  
RICHMOND, IND.WHEN WRITING FOR ESTIMATES, PLEASE GIVE  
FOLLOWING DIMENSIONS:

- 1st. Give the number of sashes to be lifted.
- 2nd. Give the length and depth of sashes, (depth  
is down the roof.)
- 3rd. Give the length of house.
- 4th. Give the height from the ground to the comb  
of roof.
- 5th. Give the thickness and width of rafters or  
sash bar.

H. W. EAMES & CO.'S  
PATENT TWIN

## GLAZIER POINTS



## A USEFUL INVENTION

The twin point at the upper left hand corner of cut  
represents the full size of points, while the tool that  
is used for pushing the points into the window frame  
is shown on the cut.

No more leaky Skylights! No more slipping  
and breaking of glass in greenhouses  
or Farmers' Sash.

These points the manufacturers claim are far su-  
perior to the old mode of setting glass, as they will  
hold each pane in place, thus not allowing the glass  
to slip, causing binding and consequent cracking.  
Each box contains 500 rights and 500 lefts. The man-  
ufacturers also make a tool for driving the points.  
These points are the cheapest and best, and most  
durable in the market: as testified to by many  
florists in every state in the union. Sold by most all  
prominent seedmen in the country. If you don't  
find them at your supply stores, send direct to the  
manufacturers as we have made arrangements with  
the Adams Express Co. for low rate of express  
charges to promote traffic, so you need not fear  
charges will be too high. A Liberal Discount  
to the Trade.

Price 35 cents a box. Tools 15 cents each.  
Address all orders and communications to the  
manufacturers.

H. W. EAMES & CO.,  
Milford, Mass.

Preserve this advertisement for future reference  
and send for samples before you do your building  
and repairs.

**A. BLANC,**  
ENGRAVER FOR FLORISTS,  
PHILADELPHIA.



Catalogue of electros of plants, flowers, designs, etc., with 37 and 38 supplements, 35 cts., with vegetable, 50 cents, which deduct from first order. Electro of this Cut, \$1.50.

## SMILAX.

FINE YOUNG PLANTS NOW READY.

Address

**HENRY PALMER,**

Langhorne Nurseries. LANGHORNE, Bucks Co., PA.  
Mention American Florist.

## SMILAX FOR EASTER

IN QUANTITY FOR THE TRADE.

**STORM KING FUCHSIA**—Well rooted Cuttings, \$1.00 per 100, as good as pot plants.

**FUCHSIA PHENOMINAL**—\$6.00 per 100, or will exchange for Chrysanthemums and Geraniums of some varieties, and dbl. Abut. Thomps.

**F. E. FASSETT & BRO.,**  
Ashtabula, O.

Mention American Florist.

## ORCHIDS

Cheap as Good Roses.

Send 8 two cent stamps for Catalogue and Plate.

**BRACKENRIDGE & CO.,** GOVERNORSTOWN, Md.

## WATER LILIES,

All Colors.

Young plants suitable for late flowering  
NOW READY.

Send for prices.

**BENJ. GREY,** Malden, Mass.

## Ferns, Palms, Orchids

FERNS FOR FLORISTS' PURPOSES,  
BY THE HUNDRED OR THOUSAND,

**GEO. WITTBOLD,**  
Cor. School and Halsted Sts.,  
LAKE VIEW, CHICAGO.

## OUR NEW TRADE DIRECTORY

Contains over

**6,000 Names of (Live)**

Florists, nurserymen and seedsmen, in the United States and Canada.

**PRICE ONLY ONE DOLLAR.**

AMERICAN FLORIST CO., Chicago.

**F. A. RIECHERS & SOHNE A. G.,** Florists,  
HAMBURG, GERMANY.

Largest stock of Azalea indica, Camellias, Lilacs of the valley for the wholesale trade. Price list on application.

## PALMS, ORCHIDS and DECORATIVE PLANTS.

Immense Stock, at Low Prices to the Trade.

## Siebrecht & Wadley,

ROSE HILL NURSERIES, New Rochelle N. Y.

409 FIFTH AVENUE, NEW YORK.

## TEA-SCENTED AND OTHER ROSES,

30,000 IN POTS.

**Clematis, 50,000 in pots,**

Grand plants, fit for shipment at any time.

## 200,000 Dwarf Roses for Fall Delivery.

Our collection is unequalled, and the plants promise to be exceptionally fine.

20 ACRES FRUIT TREES. 10 ACRES RHODODENDRONS.

Descriptive and Priced Lists mailed on application.

## JOHN CRANSTON & CO.,

KINGS ACRE NURSERIES,

ESTABLISHED 1785.

HEREFORD, ENGLAND.

## ADVERTISE IN OUR CONVENTION SUPPLEMENT.

## ORCHIDS! ORCHIDS!

Many additions of Choice New varieties this season.

Send for New Catalogue.

**WM. MATHEWS,**  
UTICA, N. Y.

## 2000 SMILAX PLANTS

at \$4.00 per hundred.

ROSES at \$8.00 per 100, 3½-in. pots, consisting of *Perles*, *Mermets*, *The Bride*, *Bon Silene*, *Niphetos*, etc. Also for September delivery, *Carnation Pinks*, *Bouvardias*—including *President*—*Primroses*, etc.

**W. A. BOCK,**  
NORTH CAMBRIDGE, MASS.

## SMILAX.

Fine plants from 2-inch pots, \$3.00 per hundred.

## ROSES.

From 3 and 4-inch pots, \$7.50 and \$10.00 per hundred, in the following var., *La France*, *Mad. Cusin*, *Mad. Watteville*, *C. Mermet*, *Bon Silene*, *M. Robert*, *Comt. de Frigneuse*, *The Bride* and *Niphetos*.

## THEO. BOCK,

Cor. 10th and Heaton Sts., HAMILTON, OHIO.

## PANSIES.

My collection of Pansies has for years attracted a great deal of attention. Florists and amateurs both conceding them to be of the highest quality.

My Collection received Premiums wherever Exhibited.

Pansy seeds, all varieties, mixed, per ounce, \$3.00; 1½ ounce, \$1.00.

Tricolor and all the large flowering kinds, mixed, 100 seeds \$1.00. Send for price list.

OSCAR R. KREINBERG, box 294 Philadelphia, Pa.

## SURPLUS TO EXCHANGE

For H. P. and Tea Roses, 2½-in. pots.

4,000 Finest Named Ranunculi; 2,000 *Eulalias*, var. and zeb.; 500 *Am. Sarinensis*; 500 *L. Candium*; 20,000 *A. Atamasco*; 400 *Cooperia Drummondii*; 100 *Iris Susiana*; 100 *Hemerocallis flava*; 100 *Arundo donax* var.; 400,000 Sets *Ex. Pearl Tuberosa*, both extra large and medium. Address at once with offers.

MRS. J. S. R. THOMSON, Spartanburg, S. C.

Mention American Florist.

## Delegates to the New York Convention

And all others are cordially invited to visit our Nursery at Riverton, N. J. and inspect our stock of

**PALMS, PANDANUS, FERNS, AND ROSES,**

## DECORATIVE PLANTS.

For Fall and Winter use. We can show you the best stock in the country, grown by ourselves, and will make prices satisfactory. Come and see for yourself, that we may prove all we say.

Our Mid-Summer Price List mailed to all applicants.

Western delegates traveling via Philadelphia can stop over at Riverton on their tickets. Riverton is on the line of the Pennsylvania R. R. system to New York.

**HENRY A. DREER,**

714 Chestnut Street, PHILADELPHIA.

## ORCHIDS A SPECIALTY.

The Stock at the Clapton Nursery is of such magnitude that without seeing it it is not easy to form an adequate conception of its unprecedented extent.

**Coleus, Roses, Fruit Trees, Ornamental Leaved and Flowering Plants, also**

## GENERAL NURSERY STOCK

Of fine quality and immense extent.

The Glass Structures cover an area of 297,300 feet.

**HUGH LOW & CO.,**

Clapton Nursery, LONDON, ENGLAND.

## KALAMAZOO CELERY PLANTS

Ready June 1st at \$2.00 per 100 for any of the leading varieties; large lots very cheap. Celery Culture complete 50 cts., or give us all orders of 5000 plants or over. **G. BOCHOVE & BRO.,** Kalamazoo, Mich.

## PRIMULA OBCONICA IN QUANTITY.

FINE, HEALTHY PLANTS.

**PETER FISHER,**

Montvale, Mass.

Every Florist! Every Nurseryman! Every Seedsmen!

SHOULD HAVE OUR



## DIRECTORY,



Address AMERICAN FLORIST CO., 54 La Salle St., CHICAGO.



## Chicago.

Mr. F. Calvert, of Lake Forest, has started on a three month's trip to his early home in Scotland.

M. F. Gallagher is having his store entirely remodeled. During the alterations he is located temporarily at 179 Wabash avenue.

The local base ball enthusiasts are dreaming nightly of the warm reception which will undoubtedly be accorded them by their eastern brethren.

Mr. John Lane, of 4801 Lake avenue, recently gave an evening show of blooming plants in pots upon the lawn in front of his residence. The night blooming cereus was central with lily auratum and evening primrose prominent features. A bright light was shining upon them, for the enjoyment of the neighbors and the passing public. At times the place was thronged with visitors and many were delighted with the beautiful show.

At the last meeting of the Florists' Club, held July 26, a very interesting paper was read by President F. F. Bentley on "Our home cut flower market from the standpoint of the retail dealer." Extracts will be given in next issue. The subject matter was freely discussed by the members present. It was decided to postpone the contemplated chrysanthemum show till 1889, as it was deemed inexpedient to attempt to hold an exhibition during the excitement incidental to a Presidential election. The following resolution was offered for debate at the next meeting: Resolved that it is against the best interests of the whole trade to push prices to such high figures at the holidays. The affirmative will be taken by F. F. Bentley, and the negative by G. L. Grant; to be followed by a general discussion.

**GLAZING.**—Owing to the constant expansion and contraction due to the sudden changes of weather in this climate there should be plenty of room on each side of the glass to be filled with putty. Glass which fits tight between the bars is soon broken through lack of room for expansion. As few tins as possible should be used, in fact only enough to hold the glass in place while the putty is being put on outside, for I contend that there should be putty outside as well as under the glass. Avoid the use of stiff iron tacks which binds the glass too firmly. It will surely crack across where tacked so tight that there is no room for expansion. D. B. F.



## FOR THE TRADE. FLORAL WIRE DESIGNS.

JAS. GRIFFITH,

THE PIONEER MANUFACTURER IN THE WEST,  
305 Main Street, - CINCINNATI, OHIO.  
SEND FOR WHOLESALE PRICE LIST.



## SOMETHING NEW.

Look for us at the Convention.

Philadelphia Immortelle Design Co.,

904 Filbert St., Philadelphia, Pa.



ONLY POTTERY MAKING A SPECIALTY OF

## FLOWER POTS

FOR FLORISTS.

THE WHILLDIN POTTERY CO.,

713 & 715 WHARTON ST.,

PHILADELPHIA.

## BARBED GLAZIER POINTS

WITH OR WITHOUT LIPS.

Pat. in April and May, 1883.

No more CLIMBING OVER the glass.

NEW MODE OF SETTING.

Commencing at the top instead of the bottom. These points hold better than all others. No. 1 will hold glass 10x15, and No. 2 will hold glass 18x24, not allowing it to slide 1/2 inch in five years.

Glass fastened with them, and the methods of using these points, will be fully shown at the coming

— FLORAL EXHIBITION —

In New York in August next.

FOR SALE IN

Boston, Mass., by Wm. J. Stewart, 67 Bromfield St.  
NEW YORK, by Peter Henderson & Co., 35 and 37  
Corlandt Street.

CHICAGO, by J. C. Vanden, 146 W. Washington St.  
Retail without lip 50c., with lip 75c. per 1000. Pin-  
cers 50c. Liberal discount on large orders.

B. B. CHANDLER,

Patentee and Manufacturer,

HYDE PARK, MASS., U. S. A.

Mention American Florist

ESTABLISHED, 1866.

## Floral Wire Designs,

Manufactured by

N. STEFFENS,

335 East 21st Street. - NEW YORK.



## SYRACUSE POTTERY CO.

Ships Greenhouse Flower Pots to Maine, Florida, California and Texas—everywhere in crates only, but with no charge for crates or freight. New clay mill, two engines, new revolving moulds turn out finest, smoothest and most perfectly finished pots in the market. No more rough pots. Send for list, rates and prices of 20 sizes (thumbs to 16 inch) packed to order. Our great cut in the prices of

17 READY PACKED CRATES has given us an immense trade all over the South and West. No Pottery ships so far, so securely and so cheap as we do. Our new revolving machines finish pots finer than any hand-made pot, and we carry a big stock ready to ship the day the cash comes. No traveling men, notes or accounts.

## GREENHOUSE POTS

are our great specialty. We have three sizes of deep "Knee Pots" at \$7.75, \$14.00 and \$25.00. We pack crates of mixed sizes to order. A crate usually weighs 100 lbs. and goes at buyer's risk and freight. We give samples in first crate. We ship on receipt of order and cash without delay. Our storehouse is crowded.

**PRICES PER CRATE, CASH WITH ORDER:**  
3,150 Thumbs, \$8.00; 875 3/4-inch, \$5.50;  
2,625 3/4-inch, \$4.00; 400 4-inch, 4.75;  
1,575 3/4-inch, 7.25; 300 4 1/2-inch, 3.40;  
1,200 special 5 1/2-inch, 6.00; 250 5-inch, 4.40;  
1,150 3 1/2-inch, 5.50; 100 6-inch, 3.50;

J. N. PERKINS, Manager, Syracuse, N. Y.

## D. C. SCHOFIELD,

— MANUFACTURER OF —

## Improved \* Greenhouse

## \* FLOWER POTS \*

NEW BRIGHTON, PA.,

Offers to the Trade the BEST

Quality of Improved Shoulder Pot  
in the market at the

LOWEST PRICES EVER OFFERED.

SEND FOR PRICE LIST.

Orders will receive prompt and careful attention and satisfaction is warranted in every respect.

## HAND TURNED EARTHEN WARE

Price list for 1888.

2 1/2-inch....	per 100, \$5.50	8-inch....	per 100, \$5.50
3 1/4-inch....	" 3.00	9-inch....	" 6.75
4-inch....	" 3.80	10-inch....	" 8.00
5-inch....	" 1.38	12-inch....	" 23.50
6-inch....	" 2.20	14-inch....	" 38.00
7-inch....	" 3.75	16-inch....	" 100.00

No charges for package or cartage. Send \$1.00 for sample barrel before purchasing else where. All florists will find it to their advantage to do so, as we make the best and strongest ware in the market. Terms cash. Address communications to  
DREYFUS BROS., Fort Edward, N. Y.

ADVERTISE IN  
— OUR —

CONVENTION SUPPLEMENT.

## Greenhouse Pipe and Fittings



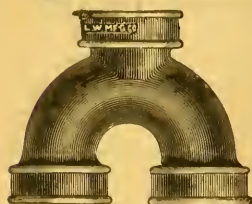
Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

## GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

Mention American Florist.



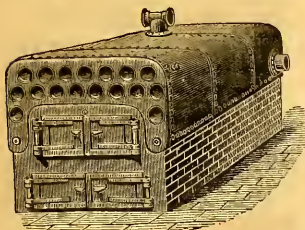
L. Wolff Mfg. Co., 93 to 111 W. Lake St. CHICAGO

ESTABLISHED 1854.

## Devine's Boiler Works

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers.



Capacity from 350 to 10,000 feet of four-inch pipe.  
Send for New List.

PETER DEVINE,

387 S. CANAL ST.,

CHICAGO.

## Ives' Putty Machine.

Patented Jan. 8, 1887.

The best device ever invented for laying putty. With this you can make old leaky sash perfectly tight without removing the glass. It will do the work of five men in hedding glass.

Sent by Express on receipt of price, \$3 00

J. H. IVES, DANBURY, CONN.

## HALES' MOLE TRAP

For destroying ground moles in lawns, parks, gardens and cemeteries. The only PERFECT mole trap in existence. Guaranteed to catch moles where all other traps fail. Sold by gardeners, Agricultural Implement and Hardware dealers, or sent by express on receipt of \$2.00 by H. W. HAYES, RINGWOOD, N. J.

## Conservatories

GREENHOUSES, ETC.

Erected in any part of the U. S. or Canada.  
Glazed on the

Helliwell Pat. Imperishable System

OR WITH PUTTY.

For further testimonials, illustrated catalogue or estimates address

## JOSEPHUS PLENTY.

HOPTICULTURAL AND SKYLIGHT WORKS.

OFFICES, 124 Pearl Street, NEW YORK.

NOT  
DED BASH.  
VENTILATORS.  
WRITE FOR PRICES.

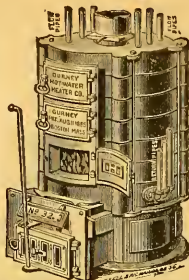
FULL SIZE  
of  
SASH  
IN  
PINE or CYPRESS.  
WE CARRY  
A  
FULL STOCK  
OF  
12' 14' and 16' foot lengths.

JOHN L. DIEZ & CO.,  
530 No. Halsted  
Street,  
CHICAGO.

"ZERO TO 27" BELOW AND THE HEATER GIVES BEST OF SATISFACTION."

Letter from Thomas Gray, of Fitchburg, Mass.,  
in reference to

## GURNEY HOT-WATER HEATER.



FITCHBURG, MASS., April 13, 1888.  
Dear Sirs:—In answer to yours, asking my opinion of the Gurney Hot Water Heater which you sold me, would say that I have had fifteen years' experience in heating hot houses by water, and must say the Gurney Heater purchased of you has proved itself a wonder, both in power and economy, using one-third less fuel to get same result than any heater I have ever used. The brick-lined pot I consider a special feature, as it renders combustion equal throughout the entire pot.

Yours truly,

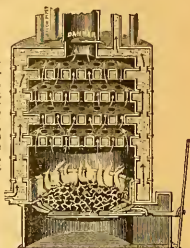
THOMAS GRAY, Florist

Illust. Catalogue &amp; Testimonial Sheet Free.

## GURNEY HOT WATER HEATER CO.

237 Franklin Street, BOSTON, MASS.

SELLING AGENCIES—M. H. JOHNSON, 140 Centre St., N. Y. RICE & WHITACRE MFG. CO., 12 & 41 W. Monroe St., Chicago, Ill.; T. R. CHASE, 31 Edmund Place, Detroit, Mich.; WILLIAM N. GARDINER & CO., 124 Third St., Portland, Oregon; J. L. FRISBIE, 526 Phila. St., Covington, Ky.; WALK & MURDOCH, 16, 18 & 20 Hasell St., Charleston, S. C.



ESTABLISHED 1853.

— THE —

## O. K. STEAM GENERATOR

Is especially adapted to warming

GREENHOUSES, GRAPERIES  
AND CONSERVATORIES.

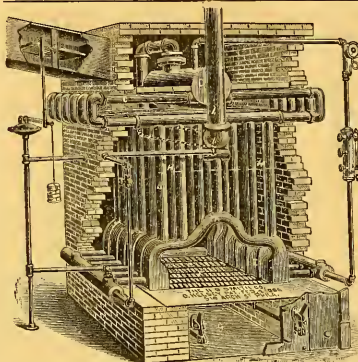
Special features insure

Economy, Simplicity, Durability,

BURNS SOFT COAL OR WOOD,

Giving best results with least labor and fuel.

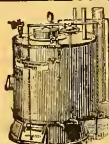
SEND FOR DESCRIPTION.



THE M. B. SMITH CO.,

510 Arch Street, PHILADELPHIA, PA.

Mention American Florist.

Reduce your Coal Bills  
THE FURMAN STEAM HEATER

ESPECIALLY ADAPTED FOR

WARMING GREENHOUSES.

Gives a most uniform heat night and day. Can be run with less attention, and a SAVING of fully 20 to 25 Per Cent. in fuel over any other method. Burns H&B or SOFT COAL. Endorsed by leading florists. Send for full illustrated Catalogue, Address HERENDEN MANUFACTURING CO., GENEVA, N. Y.

IMPROVED GLAZING.

J. M. Gasser's Patent Zinc Joints,



For butting glass without laps; makes it air and water tight; saves fuel and glass. No breakage from frost. Also the best improved fuel oil burners for steam boilers. Send for sample and price list.

J. M. GASSER,

101 Euclid Avenue, CLEVELAND, O.

## FOUND GUILTY!

Of selling the highest price, cheapest made  
and largest coal consuming

## STEAM AND HOT WATER BOILER

manufactured if you are interested in the  
above, and would like to know what your  
brother florists have to say, send stamp  
for circulars.

F. W. FOSTER,

25 Beverly Street, BOSTON, MASS.

## GOLDMAN'S ATOMIZER AND SPRINKLER

FOR A THOUSAND AND  
ONE USES.Practical  
and Useful.You will  
not part  
with it.

For Flowers, Window Gardening, House Plants, Destroying Insects, and for various fine sprays. Most natural substitute for fog or dew. By dipping in water while closed, fills instantly. Ball finely perforated; spray controlled by pressure of hand. Size of lemon squeezer. Weight, 5 oz. Exclusive Territory to Agents. Sells on its own merits; no talk. This is the Atomizer that sold so well at the Danbury, Albany and other Fairs. Florists and Seedsmen, show it to your customers; sells fast; good profit. Excellent for indoor plants. Send for illustrated pamphlet and price to the trade. Mention this paper.

M. GOLDMUN, Manufacturer, Pittsfield, Mass.

## SASH BARS

VENTILATORS, RIDGES, GUTTERING  
AND LUMBER.

NO WIDE-AWAKE FLORIST need be told  
it will pay him to use Sash Bars, etc. made from

CLEAR CYPRESS.

Bars all Shapes up to 20 feet long.

Send for circulars and estimates.

LOCKLAND LUMBER CO.,

LOCKLAND, HAMILTON CO., OHIO.



## Index to Advertisers.

Adams, C. T.	582	Jansen, Ed.	582
Advertising Rates, etc.	573	Joosten, G. H.	575
Allen, C. H.	579	Kannick Bros.	575
Allen, W. S.	579	King, James.	579
Bali, Chas. D.	579	Kreinhart, Oscar R.	583
Bayardorfer, M. M. & Co.	582	Kretzger, E. H. & Son.	578
Benger, H. H. & Co.	575	Krick, W. C.	586
Blanc, A.	583	Laing, Jno. & Sons.	580
Bloch, G. & Bro.	583	La Roche & Stahl.	575
Bock, Theo.	583	Lockland Lumber Co.	583
Bock, Wm. A.	583	Low, Hanch & Co.	583
Bonsall, Joseph E.	583	Mathews, Wm.	583
Boyson, Jas. L.	578	McAllister, F. E.	579
Brackridge & Co.	583	McCarthy, N. F. & Co.	579
Brague, L. B.	582	McDonald & Grace.	581
Branneman & Pether.	581	McTavish, G. A.	581
Brothers Ind'l Gard's.	582	Maitre, R.	573
Burt, Albert.	573, 580	May, J. N.	573
Butz, Paul & Son.	580	Merrick, A. T.	584
Chandler, B. B.	584	Michel Plant Seed Co.	581
Classman, Geo.	578	Miller, Geo. W.	573
Cole & Whiteley.	575	Monon Route.	582
Cook, J.	573	Mooy, Polman.	578
Congrove, J. A.	573	Myers & Co.	586
Crawton, Jno. & Co.	578	Nanz & Neuner.	578
Curtis Bros.	578	Palmer, Henry.	583
Curwen, John Jr.	575	Pennman, Jas. A.	580
De Voer, J. A.	579	Perkins, J. N.	584
Devine, Peter.	585	Phillips, Jas. & Co.	584
Dier, John J. & Co.	583	Pleety, Joseph.	585
Dillon, J. L.	580	Quaker City Mch. Co.	582
Dreer, H. A.	578, 582, 583	Reichers, F. A. & Sohn.	585
Eames, H. W. & Co.	582	Rosen, F. & Fienck.	580
Elliot, B. A. & Co.	581	Solker, A. & Sons.	579
Fairfield, C. F.	574	Schneider, Fred.	580
Fassett, F. E. & Bro.	583	Schofield, D. C.	584
Ferris, Robt. M.	573	Schulz, Jacob.	573
Fisher, Peter.	583	Scollay, John A.	581
Fitzral Echnan, The.	579	Seltzer, Gus.	579
Foster, F. W.	585	Segers & Co.	579
Gardfield Park Rose Co.	585	Shortland, W.	579
Gasser, A. M.	585	Siebrecht & Wadley.	583
Giddings, A.	579	Sitlington, Wm.	575, 573
Goldman, M.	585	Smith, H. & Co.	585
Goude & Recoe.	580	Smith, Chas. & Son.	580
Gray, Benj.	583	Smiths, Powells Lamb.	581
Grimm, Jas.	584	Sponner, Wm. H.	573
Grimm, N. S.	581	Stedens, N.	584
Gurney Heater Co.	585	Stewart, Wm. Jn.	575, 577
Hales, H. W.	585	Storrs & Harrison Co.	576
Hallack, V. H. & Son.	579	Strauss, C. & Co.	575
Hammond, Benj.	579	Studer, N.	575
Hammond & Hunter.	575	Thompson, G. & Sons.	577
Hargadine, R. W.	576	Thompson, J. S. H.	583
Harris, Henry.	579	Van der Schmit & Son.	583
Henderson, Peter & Co.	571, 581	Vaughan, J. C.	575
Herendson Mfg. Co.	585	Warr, Thos.	580
Herr, Albert W.	581	Weathered, Thos. W.	584
Higley, Henry G.	578	Welch Bros.	575
Hilfinger Bros.	584	Whitford Pottery Co.	584
Hitchins & Co.	581	Whitford, Geo.	575, 583
Holbrook & Fox.	574	Willis, L. Mfg. Co.	584
Hooker, H. M.	586	Wood, L. C. & Bro.	573
Hutchinson Bros.	573	Yonge, Thos. Jr. & Co.	575
Ivan, J. H.	585	Zinskebel, Denys.	579

## Buffalo and Vicinity.

Western New York florists who will attend the New York convention will communicate with Daniel B. Long, Buffalo, regarding transportation. Information as to route and rates will be furnished by him on and after August 10. If a sufficient number will go from Buffalo a special car can be obtained.

## ROSES.

We have several thousand extra fine plants grown in pinch pots from two-eyed cuttings at the following low prices: Per 100  
 PERLES and NIPHOTOS \$12.00  
 MERIMETS and LA FRANGE \$2.00  
 BUN SILENE and SAFRANO 10.00

J. L. DILLON, Bloomsburg, Pa.



## GREENHOUSE HEATING AND VENTILATING.

Superior Hot Water Boilers.

JOHN A. SCOLLAY,

74 & 76 Myrtle Ave., Brooklyn, N. Y.

Send for Catalogue.

## GREENHOUSE HEATING.

BY A. B. FOWLER.

Explains fully all the best systems of heating greenhouses by both hot water and low-pressure steam. Tells you the points to consider in selecting an apparatus. How to adjust same to various locations; gives the results of the latest scientific experiments. Shows how to compute the number of feet of pipe required for a given space; draft and other important matters. It is highly recommended by Mr. John Thorpe and others. Postpaid, 75c.

Send on receipt of price. Address,  
 AMERICAN FLORIST,  
 CHICAGO.



Sectional View.

## IMPROVED BOILERS

FOR HEATING

## GREENHOUSES

GRAPERIES, POULTRY-HOUSES, ETC.

ALSO FOR HEATING

WITH HOT WATER UNDER PRESSURE.

## VENTILATING APPARATUS

For Raising Sashes in Greenhouses.

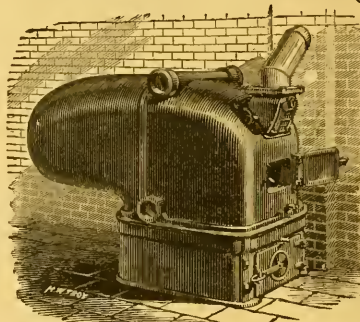
GALVANIZED SCREW EYES

And Wire for Trellis Work.

Send for Catalogue.

Thos. W. Weathered,  
 46 & 48 MARION ST., N. Y.

## Greenhouse Heating AND Ventilating



Send 4 cents postage for Illustrated Catalogue.

## HITCHINGS &amp; CO.

233 Mercer Street, New York.

Five Patterns of Boilers,  
 Thirteen Sizes,

Corrugated Rire Box Boilers

Saddle Boilers,

Conical Boilers,

Base Burning Water Heaters

Perfect Sash Raising Apparatus.

## Improved Hot Water Boilers

For Heating

## Greenhouses, Graperies,

CONSERVATORIES, ETC.

ALSO

Cast Iron Pipe, Fittings, Valves and  
 all Material for Heating by  
 Hot Water.

Send for Catalogue.

## MYERS &amp; CO.

1173 So. 9th St.,

PHILADELPHIA.

## THE CELEBRATED WILKS WATER HEATER!

For Heating

GREENHOUSES,

DWELLINGS,

POULTRY HOUSES,

STORES, BATH TUBS,

ETC., ETC.

Send for Price List.

S. Wilks Mfg. Co.,

Cor. Monroe & Clinton Sts., Chicago.



ALL SIZES OF SINGLE AND DOUBLE THICK

## GLASS FOR GREENHOUSES.

ALL GLAZIERS' SUPPLIES.

Write for Latest Prices.  
 Mention American Florist.

# THE AMERICAN FLORIST

## NURSERYMEN'S DEPARTMENT.

Vol. III.

CHICAGO AND NEW YORK, AUGUST 1, 1888.

Supplement to No. 72.

### THE AMERICAN FLORIST

Copyright, 1888, by American Florist Company  
Entered as Second-class Mail matter.  
Published on the 1st and 15th of each month by  
THE AMERICAN FLORIST COMPANY.  
GENERAL OFFICES, 54 La Salle Street, Chicago.  
EASTERN OFFICE,  
Room 15, Vanderbilt Building, New York.

All communications should be addressed to the  
general office at Chicago.

#### THE AMERICAN ASSOCIATION OF NURSERYMEN.

GEORGE A. SWEET, Danville, N. Y., president;  
G. J. CARPENTER, Fairbury, Neb., first vice-pres-  
ident; CHARLES A. GREEN, Rochester, N. Y., sec-  
retary; A. E. WHITNEY, Franklin Grove, Ill.,  
treasurer. The next annual meeting at Chicago  
the first week in June, 1889.

THE AMERICAN FLORIST having among  
its readers a large number of nurserymen  
—some engaged as both florists and nur-  
serymen and others as nurserymen only  
—now proposes to add a feature which  
will in the opinion of the publishers,  
largely benefit the nursery trade. The  
SUPPLEMENT FOR NURSERYMEN will be  
published with each issue during the  
months of August, September, October,  
January, February and March.

The supplement, appearing *twice each  
month* during the selling and buying sea-  
sons, offers an advertising medium which  
will be unsurpassed as we shall mail copies  
of the issue containing the SUPPLEMENT to  
every nurseryman and dealer in nursery  
stock in the United States and Canada.  
Nurserymen having a surplus of any  
stock can make the fact readily known  
through the the columns of the supple-  
ment, and buyers can quickly decide  
where to send their orders so as to have  
them filled without delay.

While the main object of the supple-  
ment will be to furnish a suitable trade  
medium for nurserymen, current news  
and notes of interest to the trade will  
also be a feature, and one which will be  
think we are appreciated.

Send us a trial advertisement for the  
first supplement which will be mailed  
with our issue of August 1. Also any  
news notes of interest to the nursery  
trade.

A CHICAGO FLORIST says the supple-  
ment for nurserymen is a good thing,  
and adds: "I frequently have calls for  
trees and shrubs and so do most florists.  
The supplement will stimulate a trade  
of this kind, as buyers always prefer to pur-  
chase of some one whom they know to be  
reliable and whom they can find  
again, rather than from an agent.

ROBERT GEORGE, of the Storrs & Har-  
rison Co., Painesville, O., was present at  
the seedsmen's convention at Chicago  
in June.

THE AMERICAN FLORIST is admitted  
by all in the trade to have been of great  
benefit to every florist in the country,  
and we propose that the SUPPLEMENT  
FOR NURSERYMEN shall be of equal ben-  
efit to the nursery trade.

MR. FRANK FELL, representing Thos.  
S. Ware, Tottenham, London, is in this  
country looking after the American trade  
of this well known house. He states that  
his sales of Industry gooseberry and  
clematises have been very large.

ADVERTISING RATES in the supple-  
ment will be the same as in the body of  
the paper, viz., 10 cents a line agate, 14  
lines to the inch; discounts 3 months 5  
per cent., 6 months 10 per cent. No  
special position guaranteed nor reduc-  
tion for large space.

NEWS NOTES.—We want notes of any  
thing of interest to the nursery trade.  
Send them in. Changes of location,  
reorganizations or changes in firms,  
condition of nursery stock in various  
localities, movements of well known  
members of the trade, etc.

OUR ADVERTISING RATES are so low  
that you can publish lists of surplus stock  
in the SUPPLEMENT for less than the  
postage alone would cost you if you  
should print and mail a list yourself to  
5000 addresses. A full page for one in-  
sertion costs only \$42, half page \$21, col-  
umn \$14, half column \$7. We will print  
additional copies from type after being  
set at a nominal charge if you should  
wish additional copies to enclose in let-  
ters, etc.

#### The Detroit Convention.

About 100 members were in attendance  
at the Thirtieth Annual meeting of the  
American Association of Nurserymen,  
Detroit, Mich., June 20-22. It was de-  
cided to increase the price of nursery  
stock from 10 to 15 per cent. The matter  
of postage reduction on seeds, cuttings  
and bulbs was dropped, the association  
concluding that it was a matter for the  
Seedsmen's and Florists' associations  
which already have the matter in hand.

A paper entitled "Observations among  
Foreign Nurseries, their conditions and  
methods," prepared by Irving Rouse of  
Rochester, N. Y., was in his absence read  
to the association by N. H. Albaugh.  
Mr. Rouse's paper was devoted to French  
nurseries, its aim being to present briefly  
those points in which they differed from  
those of America. The point which  
struck him most forcibly was the utter  
lack of agricultural implements, there  
being no plows, no cultivators, in fact  
nothing but spades. In shipping, the  
products were packed in bundles or other-  
wise transported in wheelbarrows to a  
convenient point and thence taken by  
wagons belonging to the railroad com-

panies to the station, the cartage being a  
part of the regular freight charges, and  
but few of the nurserymen owning even  
a single horse. He described the method  
of transplanting and irrigation, saying  
that there was no deep cultivation, the  
ground being simply kept clear of weeds  
with the hoe. The ground is heavily  
manured and at great expense, the ma-  
nure being brought in baskets on the  
backs of women, who receive forty cents  
for a day of twelve hours' work. The  
best class of men receive from eighty  
cents to \$1 a day, and ordinary laborers  
sixty cents. The trees sold from the  
nurseries are as a rule larger and more  
mature than those put on the market by  
Americans, but then they bring higher  
prices. There are no tree dealers or  
agents but sales are made directly by the  
producers—a very large proportion of the  
sales being made at the fairs. In no city of  
Europe is there so great a variety of fruit  
as in New York. And in no other coun-  
try in the world is there such fine fruit,  
such great quantities of fruit and at such  
low prices as in America.

W. C. Barry of Rochester, spoke in  
highly commendatory terms of the paper  
and dwelt upon the want of appreciation  
in this country of the blessings we enjoy.  
"Why," said he, "you could take all our  
meat away from us and we could live  
luxuriously on our fruits alone." The  
President and Messrs. George W. Camp-  
bell of Delaware, O., and Charles A.  
Green of Rochester, N. Y., spoke in the  
same vein.

An exceedingly pleasant and gossipy  
letter from Robert Douglas of Waukegan,  
Ill., was read, to the manifest enjoyment  
of the association.

Herbert Myrick, of Springfield, Mass.,  
was to have read a paper entitled, "The  
Work of the American Nurseryman—  
What it Has Done, What It Ought to Do,  
and What Its Members Can Make Money  
by Doing." In his absence the paper  
was read by proxy. After a brief intro-  
duction the writer took the ground that,  
while undoubtedly the agency system has  
been abused, it has been of great benefit,  
for it has carried horticulture where it  
never would have gone, and that many a  
farmer who has purchased from an agent  
just "to get rid of him," has found that  
agent his best friend. The pertinacity  
of agents is often a blessing in disguise.  
A great question is how to protect the  
dealer and the people against fraud.  
This question, of course, never can be  
answered completely, but it can be done  
partially. Let the papers stop their  
wholesale attacks on dealers and confine  
their attention to men and firms they  
know to be acting wrongfully; then  
blacklist all traveling salesmen who are  
found to be dishonest or frauds in any  
sense of the word, and let dealers and  
honest agents invite farmers to report  
the names and doings of swindling sales-



men to the agricultural papers whenever they are imposed upon by them. This association must also raise a reserve fund for emergencies for there must be money for traveling and other expenses. Dues must be paid promptly and in full. What costs nothing is worth nothing. As long as no money was spent no progress was made in securing reduced freight rates, but as soon as a small appropriation was voted and judiciously expended the present beneficial results were secured. Let the association make more appropriations and present an aggressive front and it will rid itself of the discrimination which still exists.

The writer went on at some length to urge the preparation of a "census" or report of nursery stock, made up of reports from the different producers, which would tend to prevent over or under production in any particular line; he took the ground that growing stock should not be taxed; that there should be a comprehensive revision of fruit literature to keep pace with the times; that great attention should be paid to nomenclature and that proper names should be selected for new fruits; that a standing committee to co-operate with the Department of Agriculture and the State experimental stations should be appointed; that short practical papers should be made a leading feature of all meetings; that business and association matters should not be allowed to conflict and that to this end the exhibition hall and the meeting hall should be kept separate and that both should not be open at the same time.

Officers for the ensuing year were elected as follows: President, George A. Sweet, New York; First Vice-President G. J. Carpenter, Nebraska; Secretary, Charles A. Green, New York; Treasurer, A. R. Whitney, Illinois; Executive Committee, Leo. Woltz, Ohio, S. D. Willard, New York, S. M. Emery, Minnesota. Standing Committee on Transportation, S. M. Emery, Minnesota, William Pitkin, New York, Silas Wilson, Iowa, N. H. Albaugh, Ohio, and S. D. Willard, New York.

It was decided to hold the next meeting in Chicago the first week in June, 1889.

A resolution was adopted to pay the expenses of the transportation committee should they incur any, and the executive committee was authorized to levy a per capita tax of \$1 should a deficiency in the treasury require it.

#### Planting Red Cedar Berries.

[A letter from Robert Douglas read before the Detroit meeting.]

DEAR MR. PRESIDENT:—I regret that I cannot possibly be with you at Detroit. I hope you will have a pleasant and instructive meeting. I earnestly request that you will read the following to my dear highly respected lifetime friends:

"Lo! What a great fire a little spark kindleth,"  
"Great oaks from little acorns grow."

The eucalyptus, the largest of all trees, is grown from the smallest of all seeds.

All of which tends to show that this world is made up of small things. Indeed there is hardly a word spoken, whether in jest or in earnest, that does not have an effect in the future, either beneficial or disastrous.

"Bread cast on the water will return after many days,"  
"He that sows the wind shall reap the whirlwind."

I sowed a little wind about thirty years ago, and it had not quite blown out last March. It occurred as related below:

When the National Agricultural Society

held its meeting in Chicago a few years before the war, the nurserymen of the west congregated there. M. L. Dunlap, the "Rural" of the Chicago *Tribune*, asked me why we grew so many larch and did not grow the red cedar, which produced equally durable timber. I replied "That the larch was a much more rapid grower, and that red cedar could not be grown at a reasonable price, as we had so much trouble to get the seeds to germinate (they being enveloped in a resinous covering, requiring two years to get them ready for sowing), that we had experimented in many ways and could not get them to germinate the first season. I casually remarked that if we could manage the seeds as well as the cedar birds do we would have no trouble, they devoured the seeds, and seedlings would spring up from the ground under their roosts.

Then said "Rural," why not start a henry, feed the seeds to the hens, sow the droppings, then you would be manuring the land at the time you sowed the seeds; this brought out a laugh, and attracted the attention of a very enthusiastic horticulturist, an excellent friend, who said, "Now tell me what you are all laughing at." "Rural" replied telling him the trouble we had with red cedar berries and that I was intending to get a large stock of cattle and feed them on red cedar berries mixed with bran, and then sow the droppings, which would manure the land at the same time. Nothing more was thought of it, at least by me, until the next horticultural report came out; when I found that our good enthusiastic brother had swallowed the bait, and published it in dead earnest; but fortunately had not named "Rural" or I in connection with it. Well! Time rolled on, the war came and went, (although this had nothing to do with bringing on the war), General Grant was elected President of the United States, and in one of his messages to Congress called attention to the destruction of the forests, (another battle of the wilderness as it were), the United States government took hold of it in earnest. A forestry bureau was established, and an excellent gentleman appointed at the head, who had written several intensely scientific articles in the scientific journals, one of them showing the wonderful effects produced by the Mormons planting forest trees in Salt Lake Valley. So well and so plausibly were they written that they might have been mistaken for facts, had the Mormons only planted the trees, but they had not, and have not to this day.

A large volume was published by the government, over eleven hundred pages. I received a copy and had the curiosity to look it over, and see how much a man could write on a subject he knew so little about. I looked at the index, "How to grow red cedars from seeds." It was "Rural's" old chestnut, as published in the Illinois report. He had swallowed it without pickles. The years rolled on, "Rural" had worked hard and died with the harness on. So had our enthusiastic friend, improving in knowledge and experience from year to year. The chief of the forestry bureau had gone to his rest. All was peaceful. I had supposed the little wind had died out, for there had not even a zephyr stirred for many years until last March, when one of my sons visited the northern part of California to examine an experimental plantation.

While there a man accosted him, "Are you one of the Douglas' that raise the little evergreens?" and being answered said, I wonder if you raise them as I have

raised them? He said to the man, "Let me know how you raise yours and then I can tell you." He answered, "Well, I am a poor man and do not keep a cow, so I cannot raise them according to seed. I did the best I could, I soaked the seeds in bran, and then sowed them bran and all."

Fortunately I had sown only a little wind thirty years ago, so that the whirlwind passed off without fatal effects. I earnestly request you to read this letter to my dear old lifetime friend Blank. Yours very truly, ROBERT DOUGLAS.

TEAS' WEeping RUSSIAN MULBERRY.—This is undoubtedly a novelty of sterling merit. It is of American origin, a fact of which we may be justly proud. Its great merit lies in its beautiful, regular drooping habit; rapid, easy growth; hardness and adaptability to the varied climate of this country, it withstanding the heat and drought of the south as well as the severe winters of the north. It is also fortunately free from the attacks of the borers which in the south so frequently destroy the well known Kilmar-nock willow, the only weeper which can be compared with the above.

WHEN REPLYING to advs., please mention that you saw the adv. in the AMERICAN FLORIST SUPPLEMENT and thereby confer a favor on us as well as the advertiser who is always pleased to know where his adv. is seen, and is doing him good.

CLEAN PAGES.—We shall admit to the columns of the SUPPLEMENT only advs. of reputable nurserymen or of those dealing in wares commonly used by nurserymen. Medical advs. and other outside matters will be excluded. We believe this will be appreciated.

ONE INCH, price for one insertion, \$1.40.

TWENTY-ONE LINES, one insertion, \$2.10.

TWO INCHES, price for one insertion, \$2.80.



Copyrighted 1888—H. S. Anderson.  
**THE BEST TYING MATERIAL.** Low Rates to the Trade. Also a full line of Nursery Stock, both Fruit and Ornamental. CAYUGA LAKE NURSERIES.  
 H. S. ANDERSON, Union Springs, N. Y.

THREE INCHES, price for one insertion, \$4.20.

**E. W. PARSONS & CO.,**  
*West Chester, New York,*  
**NURSEYMEN AND FLORISTS,**  
 ORNAMENTAL TREES AND SHRUBS,  
*Rhododendrons and Roses.*

**NURSEYMEN & DEALERS**

*Send for our Wholesale Catalogue,*

**READY AUGUST 1,**

In which you will find one of the most complete assortments of NURSEY STOCK ever offered.

**ELLWANGER & BARRY,**  
 Mount Hope Nurseries, ROCHESTER, N. Y.



**BEST IMPORTED SHEARS.**

**H. S. ANDERSON,**  
 UNION SPRINGS, N. Y.

**THOS. S. WARE,**  
 HALE FARM NURSERIES,  
*Tottenham, London, England.*

**INDUSTRY GOOSEBERRY**  
  
**CLEMATIS** by the 1000,  
**FOR NURSEYMEN.**  
 Prices on application.

**Bloomington Phoenix Nursery.**

WE OFFER A FINE STOCK OF  
 FRUIT AND ORNAMENTAL TREES,  
 SHRUBS, VINES, SMALL FRUITS,  
 FRUIT TREE SEEDLINGS,  
 FOREST TREE SEEDLINGS  
 AND HEDGE PLANTS,

—: ALSO THE CHOICEST :—

**NEW ROSES AND CLEMATIS**

A Large Stock of  
**AMPELOPSIS VEITCHII, 2 YEARS,**  
 And a General Stock of  
**GREENHOUSE PLANTS.**

✉ CORRESPONDENCE SOLICITED.

**SIDNEY TUTTLE & CO.,**  
 Bloomington, Ill.

**THE**  
**Lake Shore Nurseries,**  
**OF ERIE, PA.,**

Have a Complete Assortment of  
**APPLE,**  
**CHERRY,**  
**PEAR,**  
**PLUM,**  
**PEACH**  
 AND SMALL FRUITS,  
 Which they would be pleased to give  
 prices on.

LOOK FOR  
**SAMUEL C. MOON'S**  
**AUTUMN PRICE LIST**  
 IN SEPT. 1 ISSUE.

Mention American Florist.

FOUR INCHES, price for one insertion, \$5.60.

**SAMUEL C. MOON,**  
 WHOLESALE NURSEYMAN,  
**MORRISVILLE, Bucks Co., PA.**  
 Ornamental Stock a Specialty.  
 Evergreens, Shade Trees, Purple Beech, Flowering Shrubs, Vines, Gladiolus, etc.  
 Autumn Price List will appear in AM. FLORIST in Sept. issue. Write for list of SURPLUS STOCK with special low prices.

**CHERRY TREES!!**

If you need any Cherry Trees, 1, 2 or 3 years old in full lots or by car-load send in your orders to the undersigned.

PLENTY OF  
 ENGLISH RICHMOND, ENGLISH  
 MORELLO, OLIVET, MONTMO-  
 RENCY, OSTHEIM, WRAGG,  
 MAY DUKE, GOV. WOOD,  
 YELLOW SPANISH,

And others. Have also a general supply of Nursery Stock.

Address **F. S. PHOENIX,**  
 Nurseryman,  
 BLOOMINGTON, ILL.  
 Mention American Florist.

THIRTY LINES, price for one insertion, \$3.00.

**PIKE CO.**  
**NURSERIES,**  
 LOUISIANA, MO.

ESTABLISHED OVER 50 YEARS.

400 ACRES.

No Larger Stock in America; No Better; No Cheaper.

**WRITE FOR TRADE LIST.**  
 Mention American Florist.

**TRY AN ADY.**

In one of above SPACES for our next Issue. Copy should reach us by Aug. 6 at latest.

**AMERICAN FLORIST CO.**  
 54 LA SALLE STREET, CHICAGO.



Nursery Agents—Suggestions for Reform.

BY L. A. BRYANT, PRINCETON, ILL.

It is with some diffidence that I approach so large and influential an organization as this with any suggestions as to your line of duty. I find some encouragement in the invitation you have given members to make suggestions, and also in the fact that I have had formerly considerable acquaintance with the nursery business. I now have no pecuniary interest in it, and may therefore view some things from the standpoint of an outsider as well as an insider.

Twenty-five years ago, in this part of Illinois, and in fact nearly all over the State, and I suppose also in many other States, could be found many small local nurseries whose principal business was supplying their immediate vicinity with nursery stock. The owners were generally men who had a love for horticulture, were honest and fair in all their dealings and took an interest and pride in the welfare of the stock they sold. To these men is largely owing the rapid development of horticulture in this section. But they are most all gone—those brave old pioneers—the day of the local nursery is past, and in its place we see the present large concerns with their trade of thousands of dollars where the old ones had tens. The voice of the tree-peddler is heard through the land.

I do not propose here, to question the wisdom of the change. It is enough to say that the tree trade of the country is in the hands of the tree agent, and through him largely under the control of your association. The evils of the system are gross and known to all. To be brief, perhaps the worst of these evils are: the sending out of varieties under false names; the sale of untested varieties or those known to be unsuited to the particular climate or locality; and worst of all, the employment of men of unprincipled character as agents. A nurseryman will often allow gross frauds to be practiced on his agents' billing-cut ground; and large quantities of stock to go out under false names, that would not tolerate such a thing in shipping to another nurseryman, neither would he receive such stock from another. This does not apply to all nurserymen, nor to all agents, but it is universal enough to be a stigma upon this mode of doing business, and unquestionably if a remedy is not found soon, the result will be a marked decrease in sales of nursery stock. I believe it to be a matter of dollars and cents with the trade, as well as a question of moral responsibility. I believe your association can effect a reform; one man or a few cannot. Raise the standard of the agents you employ; do it in justice to the good men now in the business; do it for your own pecuniary profit. Perhaps you cannot reform a radically bad man, but you can drive him out of the business, and thus interest in it a better class of men.

The reform, if it comes at all, must come from the association as a whole. Therefore may I not request you to present the matter to the members at the next meeting.—From Report of Detroit Meeting.

BLOOMINGTON, ILL.—Sidney Tuttle & Co. are building a new packing house and work shop.

THE PIKE CO. NURSERIES, Louisiana, Mo., established a western branch at Littleton, Col. last March under the title of Denver Stark nurseries.

It is a conceded fact that there is no better place in the U. S. for Nurserymen to sort up, Dealers to Pack, or Planters to order, than at the PAINESVILLE NURSERIES, the aim of THE



STORRS & HARRISON CO. being to carry a full line of Fruit and Ornamental Trees, Bulbs, Shrubs and Roses. Have a remarkably fine stock of Standard High Top Dwarf, and Dwarf Pear, Plum, Peach, Cherry, Apple, Quince, Russian and other Apricots, Mulberries, Grape Vines old and new; in fact a full line of all Fruits and Ornamentals, both large and small. Strong, healthy nursery grown Roses, leadings, scots, Paul Neyron, Ulrich Brunner, Annie de Diesbach, Gen'l Jacqueminot, Marshall P. Wilder,



Magna Charta, etc. Superb strong Mosses of leading kinds. A fine lot of Marechal Niel in 4 and 5 inch pots, besides a full line of Roses of all leading sorts. Strong plants of Ampelopsis Veitchii, Cyclamen, Violets, etc. A splendid lot of Carnations in open ground for winter blooming. Full line of Greenhouse and Bedding Plants. Prices reduced to suit the times. Come and see. Correspondence solicited. Catalogue FREE. 34th Year. 700 Acres. 24 Greenhouses. Address

THE STORRS & HARRISON CO., PAINESVILLE, LAKE CO., OHIO.

TEAS' \* WEEPING \* RUSSIAN \* MULBERRY.



This most remarkable tree will undoubtedly, when known, take the foremost place among Weeping Trees.

And all who see it appreciate at once, that it is not only a

FIRST-CLASS NOVELTY, but at the same time a tree of sterling merit and value.

For further information, address as below.

Our semi-annual Price List ready August 1st, in which we offer a full line of general Nursery Stock.

— LIST FREE. —

JAMES B. WILD & BROS., Sarcoxie, Mo.

FRUIT STOCKS AND SEEDS



Japan Snowball.

Both Imported and home grown, for fall and winter delivery.

Large stock of JAPAN SNOWBALL, WEEPING DOGWOOD, JAPAN MAPLES, and other Ornamental Trees and Shrubs. Send for new price list.

THOMAS MEEHAN & SON, Germantown, Phila., Pa.

NURSERYMEN'S SUPPLIES

Box Clamps, COOPERATIVE CATALOGUES, Agents' Private Guide, knives, etc. Publishers of Green's Fruit Grower. Introducers of Jessie Strawberry and Shafter Raspberry. Surplus of Grape, Currant, and Gooseberry Vines. A full line of Nursery Stock. Send for free sample of WHITE GROWER, OR GREEN ON THE GRAPE.

GREEN'S NURSERY CO., CHAS. A. GREEN, Manager, Rochester, N. Y.

IMPORTED H. P. ROSES.

Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagating quickly. Fine plants for sale by the 100 or 1000, at low rates. Price Lists to customers. Address

WILLIAM H. SPOONER, JAMAICA PLAIN, (Boston), MASS. Mention American Florist.

DORMANT BUDS.

Peach, Plum, Apricot, and Nectarine, on Plum. Cherry on Mahaleb, Quince and Dwarf Pear on Quince.

ROSES IN DORMANT BUD.

Write for prices and list of varieties, including many Novelties. MAGNOLIA GRANDIFLORA, 1 and 2 yrs. PEACHES, BLACK WALNUTS and AMERICAN CHESTNUTS, 1 year.

FRASER & LIPPINCOTT, Spring City Nurseries, HUNTSVILLE, ALA. Mention American Florist.

Stecher Lithograph Co.,

ROCHESTER, N. Y.,

MAKE TO ORDER, AND KEEP IN STOCK, COLORED PLATES FOR ILLUSTRATING CATALOGUES FOR

NURSERYMEN, SEEDSMEN, AND FLORISTS.

COLORS PLATES BOUND TO ORDER IN ANY SHAPE DESIRED.

Write for prices and list of 100 varieties. Mention American Florist.

















